Manitoba Medical Association

(Canadian Medical Association, Manitoba Division)

Tentative Annual Meeting Programme

GUEST SPEAKERS

Dr. G. R. Brow, Physician-in-Chief, Royal Victoria Hospital, Montreal, P.Q.

Dr. H. B. Church, Aylmer, Que., President, Canadian Medical Association.

His Honour Judge J. M. George, K.C., Morden, Man., President, Associated Hospitals of Manitoba.

Dr. W. B. Hildebrand, President, Wisconsin Association of General Practitioners, and Chairman, Board of Directors, A.A.G.P., Menasha, Wisconsin.

Dr. E. C. Janes, McGregor Clinic, Hamilton, Ont.

Dr. A. D. Kelly, Toronto, Ontario, Deputy General Secretary, Canadian Medical Association.

Dr. Taylor Statten, Director, Department of Psychiatry, The Children's Memorial Hospital, Montreal, P.Q.

Dr. M. M. Wintrobe, Professor and Head, Department of Medicine, Salt Lake General Hospital, Salt Lake City, Utah.

TUESDAY, OCTOBER 9th

Evening

6.30 Fort Garry Hotel:
President's Dinner to Retiring Executive of the Manitoba Medical Association.

8.00 Fort Garry Hotel:
Executive Committee Meeting, M.M.A.

All Day — Golf Tournament
For details see page 526

WEDNESDAY, OCTOBER 10th

Morning

Fort Garry Hotel:

8.30 Registration.

9.00 Scientific Session:

9.00 Round Table Discussion:
"ACTH and Cortisone."
Dr. Eyjolfur Johnson, Selkirk, Man., Chairman.

10.00 Intermission:
Red Cross Film. Visit the Scientific and Commercial Exhibits.

10.30 Radio Therapy in Cancer of the Breast,
Dr. F. G. Stuart, Winnipeg.

11.00 A Simple Diet in Diabetes,
Dr. E. R. Gubbay, Winnipeg.

11.30 Diaphragmatic Hernia,
Dr. E. C. Janes, Hamilton, Ontario.

Noon

12.15 Luncheon:
Guest Speaker: Dr. H. B. Church, Aylmer East, Province of Quebec, President, Canadian Medical Association.

Afternoon

Scientific Session:

2.00 The Pre-operative Cardiovascular Appraisal of Patients,
Dr. G. R. Brow, Physician-in-Chief, Royal Victoria Hospital, Montreal.

2.30 Hypothyroidism,
Dr. J. P. Gemmell, Winnipeg.

3.00 Intestinal Obstruction,
Dr. R. O. Burrell, Winnipeg.

3.30 Intermission:
Visit the Scientific and Commercial Exhibits.

3.45 Reluctance to go to School,
Dr. Taylor Statten, Children's Memorial Hospital, Montreal.

4.15 Prefrontal Lobotomies, Eight Years' Experience,
Dr. H. S. Evans, Brandon.
Dr. Stuart Schultz, Brandon.

Evening

6.30 General Practitioners' Dinner:
Guest Speaker: Dr. W. B. Hildebrand, Menasha, Wisconsin, U.S.A.
Psychiatric Section Meeting.
Other Sectional Meetings.

« « MENTAL STIMULATION AND READY KNOWLEDGE » »

Winnipeg, October 9, 10, 11, 12

Headquarters: Seventh Floor
Fort Garry Hotel

THURSDAY, OCTOBER 11th

Morning

8.30 **Registration.**
Scientific Session:

9.00 **Carcinoma of the Parotid,**
Dr. M. R. MacCharles, Winnipeg.

9.30 **Pancreatitis—Acute, Recurrent and Chronic,**
Dr. L. R. Rabson, Winnipeg.

10.00 **Intermission:**
Visit the Scientific and Commercial Exhibits.

10.30 **Rational Iron Therapy,**
Dr. Paul Green, Winnipeg.

11.30 **Internal Derangement of the Knee Joint,**
Dr. W. B. MacKinnon, Winnipeg.

11.30 **Non-Tuberculous Pulmonary Disease Including Bronchial Carcinoma—Recognition and Diagnosis,**
Dr. G. R. Brow, Physician-in-Chief, Royal Victoria Hospital, Montreal.

Noon

12.30 **Luncheon:**
Guest Speaker: Dr. A. D. Kelly, Deputy General Secretary, Canadian Medical Association.
"Impressions of the National Health Service in Great Britain."

Afternoon

Scientific Session:

2.00 **Diagnosis and Therapy of the Anemias,**
Dr. M. M. Wintrobe, Professor and Head, Department of Medicine, Salt Lake General Hospital, Salt Lake City, Utah, U.S.A.

2.30 **Annual Business Session.**
Presidential Address.
Annual Committee Reports.
(Voting by Ballot until 5 p.m. Friday).

Evening

8.00 **Annual Business Session** (Continued).

FRIDAY, OCTOBER 12th

Morning

Scientific Session:

9.00 **Round Table: Management of Malpositions and Malpresentations.**

10.00 **Intermission:**
Visit the Scientific and Commercial Exhibits.

10.30 **Incidence of Multiple Primary Carcinoma of the Colon,**
Dr. P. H. T. Thorlakson, Winnipeg.

11.00 **The Management of Myocardial Infarction,**
Dr. R. E. Beamish, Winnipeg.

11.30 **Therapy of Leukemia and Related Disorders,**
Dr. M. M. Wintrobe, Professor and Head, Department of Medicine, Salt Lake General Hospital, Salt Lake City, Utah, U.S.A.

Noon

12.15 **Luncheon:**
Guest Speaker:
His Honour Judge J. M. George, K.C., Morden, President, Associated Hospitals of Manitoba.
"The Patient Diagnoses The Doctor."

Afternoon

Scientific Session:

2.00 **Pharyngo-Oesophageal Diverticula,**
Dr. E. C. Janes, Hamilton, Ontario.

2.30 **Some Observations on Infants' Feeding and Development in Swan Valley Area,**
Dr. L. Kulczycki, Swan River.

3.00 **Tularemia in Central Canada,**
Dr. W. J. Wood, Winnipeg.

3.30 **A Medical Problem: The Pseudo-Feeble Minded Child,**
Dr. Taylor Statten, Director, Department of Psychiatry, The Children's Memorial Hospital, Montreal, P.Q.

4.00 **The Coroner and His Place in the Community,**
Dr. A. R. Gordon, Winnipeg, Deputy-Coroner.

Evening

Fort Garry Hotel:
Annual Dinner and Dance.

LADIES' PROGRAMME

Under the Chairmanship of Mrs. E. Johnson, the Ladies' Committee is preparing a programme that will be of interest to all ladies attending.

Full details of the activities may be obtained at the Registration Booth in the Fort Garry Hotel. Please register as early as possible.

« « WILL BE THE REWARD OF ALL THOSE ATTENDING » »

Summary of Scientific Papers

Partial List of Papers to be Presented at the Annual Meeting of the Manitoba Medical Association

October 10th

The Pre-operative Cardiovascular Appraisal of Patients

G. R. Brow

An evaluation of the cardiovascular status of a patient before undertaking any surgical procedure or administration of an anaesthetic is a traditional pre-requisite. The importance of a careful history of the patient's ability to cope with daily activities and knowledge of symptoms signalling disturbances in the circulatory dynamics will be explained. Features in the physical examination denoting an impairment of myocardial strength, active carditis or disturbed coronary blood flow will be presented. Differentiation of symptoms and signs of active heart disease from those of upper abdominal conditions will be outlined. Discussion of other systemic diseases which may have associated cardiovascular complications will also be presented. Reference to the type of anaesthesia best suited to these types of cardiovascular patients will also be discussed.

Intestinal Obstruction

Richard O. Burrell

This paper will attempt to outline the lethal factors in intestinal obstruction. A classification of obstruction will be presented with a differential diagnosis of the various types.

The treatment depends on an exact understanding of the lethal factors and a careful consideration of the type, location and extent of the obstruction. The relative and absolute indication for surgery will be considered. The use of aseptic surgical decompression will be emphasized. A new and highly successful long tube will be demonstrated, its merits discussed and the relative and absolute indications for long tube decompression will be developed.

There is no field of surgery in which disaster is so commonly associated with delayed, or ill-advised treatment.

A Simple Diet in Diabetes

Eric R. Gubbay

This diet scheme is based on the following principles: It is desirable to maintain normal blood sugar levels in diabetic patients. Frequent weighing of the patient substitutes for complex calorie determinations. In controlled diabetic patients carbohydrates alone affects the blood sugar significantly. A specimen pro forma and literature will be handed out. The use of the pro forma enables the physician to prescribe in a few minutes a flexible diet suited to the requirements of the individual patient.

The Problem of Hypothyroidism and Hypometabolism

J. P. Gemmell

The problem of differentiating between hypothyroidism and hypometabolic states will be discussed. The use of the newer diagnostic measures of radio-active iodine uptake and the determination of the plasma protein bound iodine in the diagnosis of hypothyroidism will be mentioned. The use and limitations of the basal metabolic rate will be shown, as well as errors in interpretation of the results.

The response of the hypothyroid patient to thyroid therapy will be shown to be different than the response of the euthyroid patient. The increased tolerance of the euthyroid patient to desiccated thyroid and the phenomenon of temporary depression of thyroid activity by thyroid medication will be demonstrated.

The hypothesis that the thyroid either functions adequately or not at all, for all practical purposes, will be discussed.

Leucotomies

Stuart Schultz

The paper deals with One Hundred and Twenty-five Leucotomies performed at the Brandon Hospital for Mental Diseases over a seven-year period commencing in 1943. This form of treatment was only used when other forms of Psychiatric treatment had been unsuccessful.

The first group of patients selected were patients chronically ill for a number of years.

The second group deals with more acute Psychiatric cases.

A behavior score sheet has been evolved to assess the mental condition of the patient prior to and following the Leucotomy, extending over a period of months.

X-Ray Therapy in the Treatment of Breast Cancer

F. G. Stuart

X-ray Department, St. Boniface Hospital

Considerable controversy continues to persist within the medical profession as to the proper place for x-ray therapy in the treatment of breast concer. There are many facets to the problem. The first and foremost is the one of gauging the extent of

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the disease when the patient comes for treatment. Another is the realization that the response of the neoplastic cells to x-radiation varies and cannot be predicted in any given individual. A third is that radical surgery is detrimental in advanced cases. It would appear necessary that a compromise be reached which will bring to bear the maximum advantages of surgery and x-ray and at the same time minimize their disadvantages.

It is in that group of cases that are not definitely localized, yet are not really advanced that such efforts should be directed.

Work is being done along these lines at various research centres. This will be outlined and discussed.

October 11th

Non-Tuberculous Pulmonary Diseases Including Bronchial Carcinoma— Its Recognition and Diagnosis

G. R. Brow

The universal and widespread use of chest surveys today make an understanding of pulmonary parenchymal and bronchial diseases imperative if we are to treat our patients intelligently.

The subject matter of this presentation will be concerned with those conditions of the lungs and bronchi which are of non-tuberculous etiology. An attempt will be made to point out the differences in diagnosis from a physical as well as an X-ray point of view. Diagnostic features of bronchial carcinoma will also be emphasized. Illustrative lantern slides reproduced from actual X-ray films will be shown.

Parotid Tumors

M. R. MacCharles

The practice of medicine is full of pitfalls for the wary and the unwary. Accuracy in diagnosis is essential as the first step along the right road. Only when this has been achieved can logical plans be formulated for treatment. This is particularly true in the field of cancer.

In many sites accurate diagnosis is difficult or impossible until the disease is well advanced. One of the striking exceptions to this generalization is found in the tumors of the parotid and other salivary glands. Here the diagnosis is early and easy as the lesions are superficial and characteristic so that both an early and an accurate diagnosis can almost always be made.

Unfortunately, it is a striking contrast in the field of treatment Probably in no other tumor is there as great a delay in treatment or even advice against any treatment at all as in the case of parotid tumors. This is entirely illogical as these tumors lend themselves to surgical removal and the results of treatment are very satisfactory.

A review of cases is being made to bring to the attention of the profession, the general inadequacy of treatment in these eminently satisfactory cases.

Internal Derangement of the Knee Joint

W. B. MacKinnon

The scope of this presentation is a brief review of the pertinent anatomy, mechanism of injury, history, and physical findings which lead one to the diagnosis of internal Derangement of the knee joint. Types of lesions will be discussed. Illustrations by means of slides and movies will be provided to illustrate the points to be emphasized.

Pancreatitis

L. R. Rabson

Acute abdominal pain and especially recurrent episodes of abdominal pain, often remain undiagnosed. Pancreatitis in its various forms is not uncommonly a cause of such pain. With the aid of the Serum Amylase test, this condition is being more frequently recognized, although the diagnosis is still at times difficult. An outline of the various forms of pancreatitis with a presentation of cases illustrating these types is given. A demonstration of the Serum Amylase test with illustrated charts will be set up.

Diaphragmatic Hernia

E. C. Janes

This would illustrate the different types of hernia, their recognition in practice and the possibilities of treatment. Naturally there would not be any great operative detail if your meeting is to consist chiefly of general practitioners.

Pharyngo-Oesophageal Diverticula

E. C. Janes

This is not a very common condition, and perhaps for that reason the diagnosis is not made early in many cases, and many members of our profession do not seem to be aware that treatment is possible and very successful.

October 12th

Management of Acute Myocardial Infarction

R. E. Beamish and Ellis N. East

Care of the patient suffering from acute myocardial infarction (coronary thrombosis) is an increasingly urgent problem. Not only is the disease increasing but it is affecting younger persons. Mortality, until recently, has ranged around 40%, in spite of treatment or perhaps in part due to wrong treatment based on erroneous principles of therapy. Introduction of anti-coagulants has improved results considerably, but has also posed many new problems for the physician. Should all

patients with cardiac infarction receive anti-coagulants as has been widely recommended, or if not, what are the indications for their use? Should the patient be hospitalized? Which of the growing list of anti-coagulants is most effective and safest to use? These and many other questions are perplexing the physician more and more often.

The authors have studied over 200 cases of acute myocardial infarction treated in the Winnipeg General Hospital during the years 1944-1950. An effort has been made to assess what effect the introduction of anti-coagulants has had on diagnosis, hospitalization and medical management of cardiac infarction in this community. The complications and mortality of a hundred patients treated without anti-coagulants have been compared with a similar number of patients who received them. Analysis of this study permits some clarification of the present position of anti-coagulants and underscores problems still to be met.

Some Observations on Infants' Feeding and Development in the Swan Valley Area

L. L. Kulczycki

This paper presents a review of factors influencing infants' development and stresses the importance of breast feeding, which according to available data is declining in the Swan Valley area, a majority of the babies are artificially fed. However, their weights and heights periodically recorded, are within and often above the accepted "averages," and their general health seems to be more than satisfactory.

If this observation confirms similar physical and nutritional effects in artificially fed infants in other parts of the province, and if this departure from breast feeding is noticeable there to the same extent, then the following capital question should be answered: Whether this growing practice of artificial feeding is a desirable phenomenon, and whether it should be accepted and supported as a rule from the pediatric and public health viewpoints?

Multiple Primary Foci of Carcinoma of the Colon

P. H. T. Thorlakson

Multiple primary carcinoma of the colon and rectum are relatively uncommon, nevertheless the incidence is such as to influence the investigation and surgical treatment employed in any individual case of suspected malignancy.

There is abundant clinical and pathological evidence to support the tendency to transition from innocent to malignant lesions. When multiple tumors of the rectum or colon are occasionally encountered, they are rarely present without the co-existence of innocent adenomas.

Recognition and awareness of the facts that carcinomata evolve frequently from pre-existing adenomata and papillomata will go far in reducing the morbidity and mortality from malignant disease of the colon and rectum.

Reluctance To Go To School and A Mental Problem — The Pseudo-Feeble Minded Child

Taylor Stratten

These titles will allow me to bring out the emotional needs of the infant and school child, the effects of anxiety and emotional deprivations on them, their methods of handling and their defences against anxiety. The basic principles and techniques found useful in the field of Child Psychiatry, which can be utilized by paediatrics and physicians caring for children, will be discussed in relationship to these problems.

Tularemia in Central Canada

W. J. Wood

A review of Tularemia to date in N.W. Ontario and Manitoba with reference to prevalence in animals and the high incidence among our native population indicated by positive agglutination tests against pasteurella tularensis.

Diagnosis is discussed and recommendations made from the diagnostic and public health viewpoints.

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Cancer

Studies on the Etiology of Some Human Cancers

Johnannes Clemmesen, M.D.*

In reviewing present knowledge of the cause of human cancer we find that heredity in some instances plays some—rather unimportant—part in carcinogenesis. A considerable number of well-defined environmental factors such as radioactive compounds, sunrays, aniline dyestuffs and other tar derivatives are responsible for but a limited number of cases of cancer. There are, however, indications that hormones may contribute to the development of some of the more important cancers especially in women, and that diet, presumably in combination with other factors, may be responsible for the development of esophageal cancer and of primary hepatic cancer in various human races.

In infectious disease we always find one indispensable causative factor, although other factors may be involved, as for instance heredity in human tuberculosis. It is true that the quantitative relationship between individual resistance at a given time, and the intensity of infection is of considerable importance, but one dominant and indispensable causal factor is prevalent—the micro-organism.

In the case of human cancer causative factors seem to be more equally balanced and working together in precipitating the catastrophe. But in spite of this—or because of this—we are able to prevent some cancers from appearing, as is being done in some industries today, by the exclusion of one or another factor from the environment.

In experimental cancer research it has been possible to intensify one or another causative factor, so as to make it the only apparent cause for the development of tumors under certain conditions. This is the case with the heavily inbred strains of mice, or with mice painted with powerful carcinogens. Work is in progress to study the interaction of such factors with a view to their individual effect. This may in time provide us with a model of human carcinogenesis, but at the moment we are apparently far from possessing even a model. And the possibility of such artificial intensification—and exaggeration—of one or another carcinogenic factor has, unfortunately, led some workers into premature theories, obviously influenced by the apparent simplicity of the pathogenesis in many infectious disases, appealing so strongly to many minds. We meet with a similar way of thinking in some virus theories, which, unfortunately, as far as man is concerned, seem to be just inspiring analogies built on the model of more or less artificial carcinogenesis in fowls, rabbits and mice.

In such connections it is often forgotten that the reaction of tissues is usually without pathogenetic specificity. Nobody knows how many non-tuberculous persons have in the past been infected in tuberculosis sanitariums because histology had classified their histological reaction to lipoids or talc as specific and caused by the tubercle bacillus alone. Nowadays we are more likely to suggest there is a chemical specificity—if any at all.

It would seem possible to assume that the causation of various human cancers may be little more specific than bronchial asthma, one reaction produced in many ways. We may find some cytological features to be common to malignant cells, and it may be fruitful to study them with a view to chemotherapy.

Method of Study

But while we study the processes which make a cell cancerous, we should not forget to examine the factors which make a person into a cancer patient. Otto Warburg is reported to have characterized the cancer problem as a problem of cells. Percivall Pott might—with a view to his chimney sweep boys—have called it a question of soap. In other words, the etiology of cancer may be studied from both theoretical and practical aspects, but the results wanted by everybody are the practical. In the following review it will be attempted to take a practical view of the etiological problems.

The increasing number of cancer cases cured by modern therapy makes mortality statistics increasingly inadequate as an index of cancer incidence. These statistics may, with some reservation, still be used for comparison between geographical areas which have no better information on cancer frequency. But the only reliable expression of cancer incidence is, however, the number of new cases diagnosed within a given area and within a given period.

Occasionally one meets with the demand that all cases of cancer included in statistical reports should be verified by histological or autoptic examination. While such requirements may have

*Director of The Danish Cancer Registry, at present Special Research Fellow, National Cancer Institute, N.I.H.
From: The Danish Cancer Registry, under The National Anti-Cancer League, Copenhagen, and The National Cancer Institute, N.I.H., Bethesda, Md.

been of some justification in the past, when the clinical diagnosis could not be considered entirely safe without histological confirmation, they would nowadays simply tend to exclude a number of otherwise well-established cases, and, moreover cause a selection of cancers of certain sites, which in the particular area examined are favoured by biopsies. It may also be pointed out that clinicians today through the development of clinical technique have accumulated more experience in the judgment of cases than was available at the beginning of the century.

Septimus W. Sibley, who in 1859 reported on the cancer cases from the records of Middlesex Hospital, was ahead of many workers in pointing out that his statistics do not show the relative liability of the different organs to be affected with cancer, as it contains an undue proportion of cancers easily recognized, while patients with cancers of the internal organs will go to general hospitals.

Sibley adds—somewhat optimistically—that "it need hardly be observed that, in order to form a correct idea of the relative liability of the different ages to become attacked with the disease, it is necessary to compare these numbers with the relative numbers of persons living at these various ages."

Since cancer increases rapidly in frequency with the advancement of age, it will be understood that any evaluation of the frequency of cancer in a population or area must be made on the basis of detailed knowledge of the age distribution of the population from which the cases arise. Thus, the establishment of a cancer registry is not just the question of gathering information about cancer patients, but as much a question of good civilian statistics. And when we are dealing with hospital statistics from a single town or county, it is necessary that we deal with patients from that town or county alone, and with all such patients. At the same time we must know the exact numbers and the accurate age for the population served by the hospital in question if we are to draw conclusions applicable to cancer in general.

The Danish Cancer Registry, from which the author has taken much of the evidence presented in the following, was opened in 1942 by The National Anti-Cancer League, with the moral and practical assistance of the National Health Service and the Danish Medical Association.[15] Such support was the more desirable as the organization is run on a completely voluntary basis for the purpose of research, and there can be no doubt that the results obtained would have been impossible but for the whole-hearted collaboration of hospital doctors.

All cases of cancer known to Danish hospitals, i.e., about 85 per cent of all cancer cases in the country—are reported directly to the Registry. In the remaining cases death certificates are used as source of information, under the assumption that no cancer will be cured without a visit to a hospital. For the sake of uniformity all cases are grouped according to diagnosis by the author personally. The number of cases reported from each hospital department can to some extent be checked through the annual reports from hospitals to the National Health Service.

Workers accustomed to the enormous figures shown in mortality statistics of large countries are sometimes inclined to forget that larger samples often are just a substitute for smaller samples collected with the greater accuracy possible in dealing with smaller and more uniform districts. As to conditions in Denmark, it can be stated that the country is uniform from racial, occupational and social points of view, as well as with regard to medical facilities. Each county possesses at least one large, modern public hospital, and hospital treatment is practically free of charge for 80 to 90 per cent of the population. The latter comprises four millions, of which one million lives in Copenhagen, and another in the provincial towns.

Before the opening of the Registry the author had studied the occupational mortality from cancer in Denmark with regard to groups of occupation.[11] It soon appeared that such studies would be incomplete without an evaluation of the influence of heredity factors on the development of cancer.

Esophageal Cancer

Previous studies on occupational mortality from cancer in England[26, 35] and Holland[53] suggested that deaths from cancer of the mouth, larynx and esophagus are more frequent than expected among workers in occupations exposed to alcohol, but also among a few not so exposed, particularly metal polishers and rag grinders. As a whole the less well-to-do classes showed a somewhat higher death rate from this cancer than expected.

In spite of initial doubts as to the validity of these results, it was found that, within limits, they applied also to Denmark. Here male breadwinners of the group "commercial activities" showed a death rate for esophageal cancer of 3.1 per 10,000 breadwinners compared with an average of 1.6 for all male breadwinners. For breadwinners engaged in the hotel trade the figure was 6.1 and for commercial travellers 8.3, which increase was statistically significant. Comparison with the mortality figures for England and Switzerland with full allowance for differences in the age of the population showed a very high mortality for male cases of esophageal cancer in Switzerland—the country of hotels. It deserves attention that alcohol may not in itself be the main causative factor, since also other occupations not particularly exposed to alcohol, show an increased

mortality from this cancer. Factors as dietary deficiencies[1] and tobacco[36] are known to be of importance in the development of cancers in the upper digestive tract and may play their part in the causation of occupational esophageal cancer.

The first question to arise after this confirmation of the English and Dutch results was this: Why do some waiters—and numerically they are few—develop esophageal cancers while others do not? Could this difference in reaction to an exogenous insult be due to a difference in inherited qualities?

In order to examine this problem further, the Cancer Registry entered into collaboration with the Copenhagen University Institute for human Genetics for the investigation of hereditary influence on the frequency of some cancers which lend themselves to a diagnosis of some certainty.[13]

Dr. Mogensen who started our investigations on esophageal cancer, found, however, in an unpublished study that even if this cancer was more frequent among relatives of patients, so was the habit of drinking; but he could not tell whether the drinking tendency or the cancer was inherited, or whether both were due to the social status, which was usually poor for these patients as well as for their relatives.

Mammary Cancer

(a) Heredity

A study of Breast Cancer made by Dr. Oluf Jacobsen, a surgeon, gave more positive results. Earlier studies by Wassink indicated a hereditary tendency to the development of breast cancer, but English studies by Passey had been unable to confirm those results. Eventually Jacobsen found that breast cancer was more frequent among sisters and mothers of 200 breast cancer patients than among those of normal persons. It should, perhaps, be added that for these groups of relatives every case of cancer was checked by death certificate or case record from hospitals.

Penrose et al later confirmed on English material that breast cancer shows such a tendency to familial occurrence, but they were unable to confirm another of Jacobsen's observations, namely, that cancers of other sites also show an increased frequency among the relatives of patients with mammary cancer.

By means of Jacobsen's figures Busk was able to demonstrate that when a woman has had a cancer in her right breast, her sister and mother stand a greater risk of developing an eventual mammary cancer in their right, than in their left breast. This result was communicated to English workers, who later confirmed it on the basis of their own material. (Penrose et al.[7, 12])

Before this proof could be adduced on a scientific basis it was, however necessary to establish the relative frequency of cancer in the two breasts. It was found that breast cancer usually occurs more frequently in the left than in the right breast, at a rate of 111 to 100 (Busk and Clemmesen, 1947). It is possible that both of the latter findings may be due simply to quantitative differences in the amount of gland tissue in the breasts, which in that case would be hereditary, but this is only a theoretical assumption. It deserves attention, that the first statement on such an asymmetry in the occurrence of breast cancer was made in 1842 by Stern, who, probably in Verona among 55 cases studied found 32 localized in the left and 23 in the right breast. He mentions similar findings from Vicenza.

It soon appeared from studies by Videbaek, 1947, and Busk, 1948, that information collected by questioning one or two members of each family will only be reliable with regard to close relatives, so that detailed studies on the path of inheritance can hardly be based on such information—this also because cancer patients and their relatives will usually be better informed of cancer in their family than will relatives of normal persons. But even so, the collection of information about the fate of more remote relatives served to exclude that Jacobsen's results were due to "false inheritance."

Thus it would seem that future studies will require a still more thorough questioning of members of families, and perhaps also a large number of families for examination than the usual 200. Assistance from a cancer registry will be most useful in such studies, not only for the computation of the cancer risk at various ages, but far more by the registration of cases, which, however, should cover more than one generation if we are to provide final evidence for the heredity of cancer. Some information may already now be obtained through studies on twins with cancer, but on the whole, genetical studies of human cancer seem of greater theoretical than practical importance.

(b) Age

The steep increase in cancer frequency with the advancement of age, is common to all cancers except uterine cancer, although the relation seems to vary with the site. The reason for this phenomenon is unknown. However, it may be explained by the long latent period known to follow the application of carcinogenic factors before industrial cancers develop, and probably

With regard to mammary cancer in males, Jacobson found a heavy hereditary taint in all of six families of male patients with cancer of the breast, while Penrose et al found nothing noteworthy in the family histories of their two male cases. Stern reports in 1842, that all the four male deaths from mammary cancer in Verona between 1760 and 1839 occurred in priests, and he ascribes this to the frequent fasting and the abundance of fish in the diet of monasteries, although he, with some reservation mentions other possibilities. Gynecomastia among malnourished men occurred during World War II, and is according to remarks by J. Gillman at the Oxford conference in 1950, ascribed to suppression of androgen substances caused by deficiency of diet. It would seem possible, that such suppression may also have been successfully achieved in the Verona clergy at Stern's time.

existing also for cancers of a different etiology. Such a long "incubation period" would naturally prevent cancer from appearing during the first decades of life, except where congenital factors are at work. On the other hand, it is often forgotten that such a latent period might not only vary with the site exposed but also, for instance, with the age of the person. It would seem that experimental studies of the latency period on the lines laid down by Bang in 1924, but utilizing present knowledge of genetically pure strains of mice, and of the effect of carcinogenic hydrocarbons on this species might contribute to our understanding of human cancer.

After the preparation of the present article the author found that most of the problems reviewed had previously been tackled by Rigoni Stern, associate professor of clinical medicine in Padova, who in 1842 and 1844 published studies based on the cancer deaths occurring in Verona from 1760 to 1839. Although Stern's studies compare favourably with many modern papers, for instance with regard to distribution on age classes, they were not without justification, criticized by Walshe in 1846.*

Nevertheless, the present author has found that the wording of some of Stern's conclusions was sufficiently sober to be used instead of his own.

"The cancer of the breast" Stern says, 1844, "is the more frequent, the more advanced the age of the women, and especially 10 to 15 years after the time of the ordinary cessation of the menstruation, but the mere fact that menstruation has stopped, has no influence on the pathogenesis of breast cancer."

On the latter point the accurate information on age available in Denmark has made it possible to modify Stern's statement.

Table I shows the age distribution for all cases of mammary cancer occurring in Denmark between 1943 and 1947 inclusive. The ordinate gives the number of cases per 10,000 women in each quinquennial age class, and the abscissus represents the age in years.

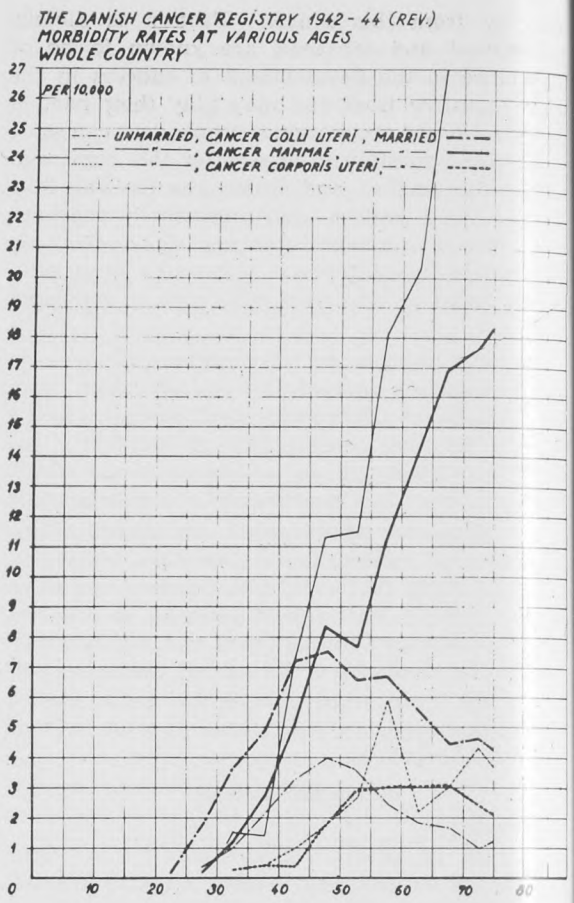

Fig. 1

Mammary Cancer, Denmark, 1943-47, distributed on age and country part.

It is worth while to notice the downward turn of the curve between the ages 47 and 53. The demonstration of this irregularity was possible because the material could defensibly be subdivided into age classes of even one year; it has later been confirmed on material from cancer registries, in the United States. (Anderson et al, 1950, Harold F. Dorn. unpubl.).

In studying this downward turn of the curve it is important to known that a careful enquiry on the age at menopause in Denmark published in 1942 by Clausager-Madsen and Ytting, gave as result 47.8 years for 176 women from the rural areas, and 48.05 for 302 women from Copenhagen. It would be natural to suggest that the hormonal imbalance caused by the onset of menopause may influence the development of breast cancer, possibly just by postponing its development, and thus transferring the cases to another age class. Therapeutical experience dating from later years, has proved that mammary cancer is sensitive to hormonal influence in a number of cases.

*"Stern attempts to show that a marked increase has for the last eighty years been steadily taking place in the frequency of the disease at Verona — and further that the increase is due to the female sex and to uterine cancer. The tables he has published — can scarcely be considered satisfactory; is it credible that ten years should pass (1770-1779) without a single death from uterine cancer while in another decennial period (1830-1839) 113 individuals fell victim to the disease? The signification of the term must have meantime changed in that part of Italy."

It seems probable that both authors may have been right, since the increase to a large extent may have been due to improvements of diagnoses, although some real increase in the frequency of uterine cancer would seem perfectly possible. The frequences given by Stern are very high for uterine cancer, but even Walshe finds a surprising correspondence between the age distribution of his cases and those of Tanchou from Paris for 1830-1839.

Walshe's own tables on occupational mortality from cancer may also be of interest to some modern readers. On the top they show the figures for "Gentlemen" and "by these terms are meant, it is to be presumed, independent persons, or those who follow no particular trade or profession." Second follow "Servants" and subsequent categories as "Labourmen," "Paupers," "Artisans," "Tavernkeepers," "Sailors," "School-masters," "Clerks," at last "Players" and "Surgeons." The female list starts with "Ladies" followed by "Servants" and ends with "Schoolmistresses" and "Soldiers' wives."

The graph gives the additional information that while the hook is well pronounced on the curve for rural areas, it is less pronounced for provincial towns, and seems almost absent on the curve for Copenhagen, the capital. Whatever the reason, there seems to be a difference between these districts in hormonal conditions for women.

Uterine Cancer

(a) Age.

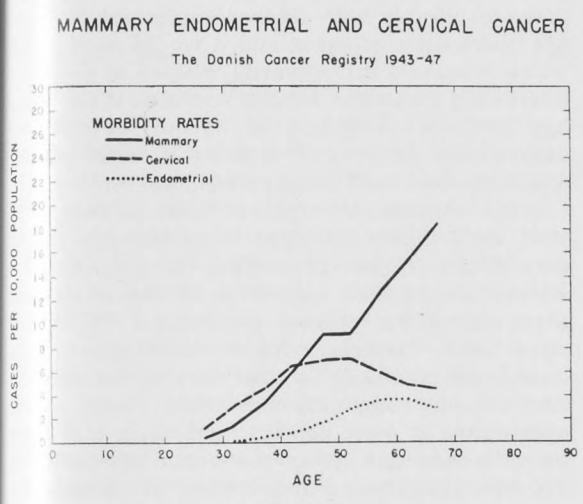

Fig. 2

Incidence of endometrial and cervical cancer in Denmark, 1943-47, distributed according to age.

Fig. 2 shows the age distribution curves for cancer of the cervix uteri and the endometrium in Denmark for the years 1943-47.[21] Regarding the curve for cervical cancer we shall find with Stern, that this cancer "is rather numerous between the 30th and the 40th year, and then almost doubles its frequency in the following two decades, to decline rapidly after the 60th year." "It has also been noticed by some authors that uterine cancer is rare in the most advanced age." Mammary cancer "after having been relatively infrequent till the 40th year, contrarily increases, especially after the 40th year."

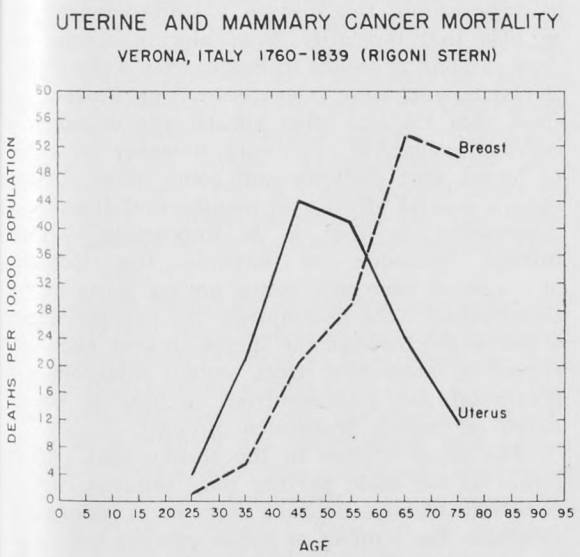

Fig. 3

Mortality of uterine and mammary cancer in Verona, 1760-1839, distributed according to age.

Table 1

Verona, 1760 to 1839. (Rigoni Stern, 1942, p. 511) Uterine and Mammary Cancer in Women. Mortality per 10,000 persons in various age classes.

Age	Uterine Cancer	Mammary Cancer
20-30	3.59	1.10
30-40	21.05	5.54
40-50	44.25	20.37
50-60	40.82	29.16
60-70	24.21	53.70
70-80	11.58	50.46
80-90	2.20	28.66
90-100	0.00	30.35

The curves we may construct on the basis of Stern's figures follow—at any rate with regard to their interrelation—largely the Danish curves for cervical and mammary cancer, although the mortality rate for Verona seems very high. One reason for this similarity, and for the correctness of some of Stern's conclusions, is, no doubt that doctors in Verona have been unable to diagnose endometrial cancer, so that Stern has worked with a purer material of cervical cancer cases than any of his successors, until it was possible to draw the curves in Fig. 2. Our greatest difficulty, nowadays, is to distinguish cervical and endometrial cancer in a percentage of cases sufficiently high to exclude the influence of non-specified cases. This has been possible in our case because 93 per cent of all Danish cases are treated in hospitals and preferably in the three Radium Centres of the Cancer League, which contributes further to the uniformity of the material.

It is clear from Fig. 2 that there is a considerable difference in the age distribution of these two forms of uterine cancer; consequently, the ratio of cervical to endometrial cancer in any population will not be constant, but must vary with the number of older women. A country with an increasing average age of the population will, therefore, show an increase in the number of endometrial cancers, and a decrease in cervical cancer rate.

It will be understandable that Stern concludes: "that the frequency of uterine cancer (here for 'cervical,' author) shows an inverse relation to the frequency of mammary cancer," adding, "I have tried other places to call the attention of doctors to these facts in view of their importance in the study of the pathogenesis of cancer."

(b) Married State

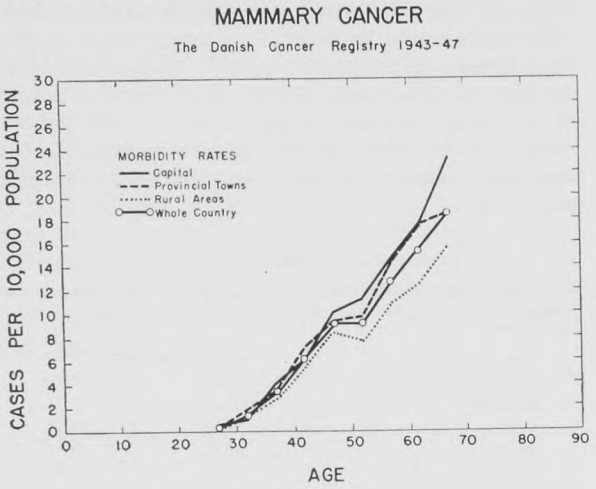

Fig. 4

Incidence of cervical, endometrical, and mammary cancer, Denmark, 1942-44, distributed according to age and marital status.

Fig. 4 demonstrates clearly that the downward turn of the curve for cervical cancer takes place in exactly the same age classes that show the temporary decline of the curve for mammary cancer. This suggests, of course. a direct relationship of both cancers to the menopause, presumably of hormonal character.

In this diagram the cases of cervical, endometrial and mammary cancer have been sorted out into "women never married" and "women married, divorced, widowed, etc."

The table, as well as many other studies by modern authors, bears out the observation which Stern ascribes to himself and A. Cooper, that "single state and even more the monastic state increases—especially the number of mammary cancers," as well as Stern's observation that "married state increases the numbers of uterine cancers."[48]

It may be mentioned that a full-dress scientific treatment of the material would involve actuarial analysis of the chance of marriage at various ages, etc., but for the present purpose the diagram will suffice as it is.

The next question is, in which way married state could be supposed to influence the incidence of cervical cancer, in case there is a causative relation and not just a mere coincidence of two frequencies.

Various authors have stated that cervical cancer is extremely rare among virgins. A small number of cases is on record, but mostly without details, and may have been endometrial cancers, or adenocarcinomata from the cervix — quite apart from the difficulty in obtaining scientific guarantee of virginity. This view has lately been strongly supported by Gagnon who reports that among 3,280 Canadian nuns, followed through a period of 20 years, he observed no cases of cervical cancer, although a small number of endometrial cancers were found. The size of Gagnon's material exceeds by far that of a similar study by Stern who found four cases of uterine cancer against 36 mammary cancers and 22 cancers of other site among nuns. And even if Stern's statement on a very high frequency of cancer in general among nuns may be difficult to explain, his study compares favourably with Gagnon's in giving accurate age distribution of cases, and it would seem worth while to make a full actuarial analysis of Gagnon's interesting material. Still, it seems as if the latter has produced evidence in favour of the old experience—that sexual activity is indispensable to a later development of cervical cancer.

This experience explains how authors who work on a material limited to certain age classes may find a higher proportion of early married women among their patients with cervical cancer than among the general population. If all the other factors necessary for the development of a cancer are present, it is clear that earlier application of the remaining one may cause earlier appearance of some cancers, and, thus, pull them into the material across the upper age-limit. A subsequent analysis will find them in the material, but to attribute cervical cancer to early marriage would account to attributing poliomyelitis to childhood as such.

(c) Jewish Rite

Even if sexual activity is indispensable to the development of cervical cancer, it does not necessarily cause an increase in its frequency, which proves that other factors must be applied in the pathogenesis of this disease. Wolff demonstrated in 1939 that mortality from uterine cancer was lower among Jewesses in Berlin than among other Germans, and there is evidence from Palestine to show that his and other similar results apply to cervical cancer.[6 39]. It would, however, be biased to forget that diabetes and some other diseases have a special affinity to members of the Jewish community so that it is impossible, without further evidence, to exclude the influence of a special hormonal status among these people. Consequently, the assumption that cervical cancer is prevented through the special Jewish rites with regard to abstention from sexual intercourse in post-natal and post-mentrual periods is, so far, based on mainly theoretical ground.

The same applies to the theory that circumcision of the male partner may prevent cervical cancer in women, because it seems to reduce considerably the number of penile cancers among the circumcised. The latter effect is often ascribed to the prevention of the inflammations complicating phimosis, although lupus cancer seems to be the only form of cancer related to inflammation.

Another explanation is that these cancers arise through continuous contact between the desquamated epithelium in the smegma and the thin epithelium of the glans. Since circumcision later in boyhood, as among Mahommedans, does not seem to prevent penile cancer, it is probable that the determining period in life is the first decade, as suggested by Kennaway. But, so far, further theories on cervical cancer founded on this observation should be classified just as interesting working hypotheses.

(d) Social Class

Among clinical workers it is a not uncommon belief that mechanical injury to the cervix caused by childbirth, if not properly healed, may produce cervicitis, which subsequently can end in cancer. Here, again, inflammation has been taken as a cause of cancer, on merely speculative basis, although the possibility of a hormonal effect is gradually gaining ground. Support—and sometimes even a proof—of the theory has been found in the fact that the number of previous births for women with cervical cancer is above the average value, while patients with endometrical cancer show the number expected, and breast cancer patients lower values. However, it should be remembered that there is not an inconsiderable number of married, but childless, women who develop cervical cancer, and even if the number of childbirths run parallel to the risk of cervical cancer, this does not prove a direct causal relation. Deaths from uterine cancer in England will, for instance, increase in frequency down the social scale in proportion to the number of births and in reverse proportion to the frequency of deaths from mammary cancer, but "the existence of a similar though not so steep gradient of mortality according to social class among single women would seem to show that other important factors beside child-bearing are involved."[46]. Illegitimate births are, however, probably unevenly distributed socially and it might be suggested that both gradients, to an unknown extent, would be influenced by a higher death rate for the poorer social classes, due, for instance, to deferred calling of the doctor, etc.

Incidence figures for each of the uterine cancers separately are more reliable as evidence than even the best mortality figures and are available from Copenhagen, where Clemmesen and A. Nielsen have been able to subdivide the city into 23 subdistricts, for which age distribution was known in detail. Social level was expressed in terms of house rent for each subdistrict. It was found that cervical cancer showed a variation in incidence from 183 per cent of the average in one of the subdistricts with the lowest house rent to 50 per cent in the most expensive quarters in Gentofte. It was striking to anybody familiar with the town

Table 2

Incidence of Cancer of various sites in Copenhagen, 1943-1947, in Districts of various house rent, given as per cent of standardized value for Greater Copenhagen. (Clemmesen and A. Nielsen.)

District	House Rent 1940	Cervical Cancer	Mammary Cancer	Lung Cancer Males
I.				
G. Gentofte	1440 Kr.	50	93	66
II.				
F. Frederiksberg	1055 Kr.	92	112	107
c. Voldkvarter	1110	83	113	75
	1050 - 1150	90	112	99/.
III.				
City subdistr. r, m, j, k, d, p.	850-950 Kr.	79	110	90
IV.				
City subdistr. o, h, s, i, l, u.	750-850 Kr.	100	94	97
V.				
City subdistr. e, b, g, t, f, a, n.	645-750 Kr.	131	92	116

how close was the parallelism between housing conditions and the incidence of cervical cancer; endometrial cancer did not show any social difference, and mammary cancer, as might have been expected, displayed a tendency opposite to cervical cancer, except for the wealthy quarters, where, also, cancer of the breast showed low figures. The rural areas, however, like the wealthiest parts of the city, showed an incidence of about only 50 per cent of the average for Copenhagen, so that we can exclude "poor general hygiene"—whatever this notion may include—as a "cause" of cervical cancer.

It may be added that lung cancer, for the first time, showed a clear social grading, which was parallel to the grading of cervical cancer.

The social grading of the frequency of uterine cancer can thus be considered beyond dispute and ascribed to differences in the incidence of cervical cancer. It is obvious that a study of the social distribution of cases of cervical cancer in childless women might answer finally the question as to whether the influence of marriage on the development of cervical cancer is caused only via childbirth—in which case also the social distribution of the disease would be easy to understand—or whether the issue is more complicated. The limited size of the material has, however, so far prevented such studies but evidence of another kind might help to solve the problem.

(e) Relation of Cervical to Mammary Cancer

The inverse relation between the frequency of mammary and cervical cancer is, as mentioned, not limited to the age classes over 50, but is also found in relation to married state and social class. As demonstrated by Stocks, districts and countries with a low birth rate will usually show low mortality from uterine cancer, and high mortality from breast cancer. while districts with a high birth rate will show the opposite trend. Single women and women in higher social classes will show the same tendency as districts with low birth rate and it may, therefore, be expected that

thorough studies will show an increased number of mammary cancers in nuns, and, possibly, also among Jewesses.

It is clear that the character of this interrelation is of great importance to our view on the pathogenesis of these cancers. It is beyond dispute that mammary cancer, at least to some extent, is subject to hormonal influence, and it is fundamental whether we must assume its inverse relationship to cervical cancer as obligate, and thus presumably due to one factor working on both cancers—for instance a hormone—or whether we can demonstrate a relative independence, which would be more reconcilable with a difference in etiology.

An analysis of the Danish cases for 1943 to 1947 by Clemmesen and A. Nielsen, shows, however, that the inverse relationship between the frequencies of mammary and cervical cancer is not invariably found; it can, therefore, hardly be ascribed to the simple effect of a single factor.

Previous studies by Clemmesen and Busk[8, 9], substantiate the impression from Fig. 1, that mammary cancer is less frequent in rural areas of Denmark than in the capital, and there is, in conformity with the earlier study, an even more pronounced tendency for cervical cancer in the same direction. Values for provincial towns take an intermediate position. Even if small differences in medical facilities should influence the figures for these cancers to any significant extent, this influence would work in the same direction for both cancers. Consequently, we must realize that the usual inverse relationship between the frequencies of mammary and cervical cancer is replaced by parallelism, when it is the question of towns and rural areas in Denmark.

Table 3

Percentage of Unmarried women in Danish country parts, in various age classes.

Age	Capital	Provincial Towns	Rural Areas
20-39	35.9	34.0	28.2
40-59	20.3	16.6	11.4
60-	20.4	14.9	10.2

It appears from table 3 that the percentage of married women is higher in the rural areas than in the capital of Denmark, which is contrary to what might be expected, if we assume that marriage increases the risk of cervical cancer.

Still, if the birth rate is the deciding factor, it might be a possibility that even identical crude birth rates for the two parts of the population could cover a higher factual birth rate for the smaller number of married women in the capital.

Tables 4 and 5 rule out this possibility. It is seen that legitimate births in relation to the number of married women show no such differences between rural areas and capital, that would be expected if birth rate were the determining factor in the causation of cervical cancer, but tends to be lower for the capital than for the rural areas.

Table 4

Birth rates for Danish country parts, computed for live births in relation to the population by residence of mother, according to files of peoples register.

	City of Copenhagen	Frederiksberg	Gentofte	Greater Copenhagen	Provincial Towns	Rural Areas	Whole Country
1941	17.1	10.8	14.0	16.0	18.1	19.4	18.3
1942	19.2	13.2	18.2	18.4	20.1	21.1	20.2
1943	20.3	14.4	18.3	19.4	21.5	22.0	21.3
1944	21.2	13.7	19.1	20.1			
1945	19.4	14.4	18.3	18.7			
1946	21.6	15.4	19.4	20.6			
1947	20.5	15.9	17.6	19.7			
1948	17.1	13.2	14.9	16.5			

Folketallingen 5 Nov. 1940 og Befolkningens Bevagelser 1931-1940. (Census Nov. 5, 1940 and the movements of the population 1931-1940)

Table 5

Annual number of legitimate births per 10,000 married women in each age class, according to residence, Denmark.

	1936 - 1940				1931 - 1935			
Age	Capital	Prov. Towns	Rural Areas	Whole Country	Capital	Prov. Towns	Rural Areas	Whole Country
16-19	5337	5832	5270	5441	4405	6999	5958	5792
20-24	2475	2943	2928	2814	2249	2870	3192	2889
25-29	1615	1965	1975	1880	1389	1796	2163	1884
30-34	953	1279	1335	1224	843	1182	1503	1262
35-39	449	707	801	691	413	714	981	780
40-44	124	252	318	255	143	291	403	316
45-49	10	23	26	22	11	26	38	29
16-49	897	1154	1140	1083	775	1074	1283	1111

Folketalligen 5 Nov. 1940 og Befolkningens Bevagelser 1931-1940. (Census Nov. 5, 1940 and the movements of the population 1931-1940)

This is the case also for previous years which will be of importance if we assume a long latency period. Also, the later years for which detailed figures are available show no great differences in crude birth rate between the wealthy part of the capital, the rest of the capital, and the rural areas.

It is, therefore, impossible to assume a simple direct relationship between birth rate and cervical cancer. It may be pointed out, however, that the cancer mortality for women in Denmark is the highest in Europe, and that is due to cancers of "accessible site." It is thus not unlikely that the exceptional proportion of uterine to mammary cancer in the various parts of the country is due, rather, to an exceptionally high incidence of cervical cancer in Copenhagen than to a low incidence of mammary cancer in the rural areas. Whatever the reason, it seems probable that about 50 per cent of cervical cancer cases could be avoided if it were possible to give the same living conditions to the poor women in the capital as those enjoyed by the wealthy or in the rural areas.

Contrarily to mammary and cervical uterine cancer, endometrial cancer seems to develop independantly of married state or social class. It has been reported that this cancer develops mostly in women with delayed menopause, and that it never occurs in castrated women. Such cases have been mentioned, however, but not reported upon in detail. Endometrial cancer seems also be develop more easily among women suffering from the estrogen-producing granulosacell tumors, and all these facts suggest that the prolonged influence of

estrogen on the endometrium is one of the factors responsible for the development of this cancer.

The shape of the age distribution curve for endometrial cancer given in Fig. 2 seems in conformity with the assumption that estrogen is largely involved in its causation. Thus, it is comprehensible that the disease most often develops later than the average menopause, perhaps in women with a high production of estrogen. The gradual decline of the curve would then be due to the combination of an increasing frequency of cancer among the women so disposed, together with a gradual decrease in their actual number among the population. This is, of course, only one interpretation of the curve, but it should be remembered that any theory on the pathogenesis of this disease must be in conformity with its actual incidence by age.

(f) Heredity

Genetical studies on endometrial cancer were carried out by Brobeck in Copenhagen in 1949 on 90 families and showed an increased tendency to the development of uterine cancer among sisters and mothers of patients with endometrial cancer, but no increase in frequency of cancers in other sites.

Sisters of 200 patients with cervical cancer—but not their mothers—showed an increased frequency of uterine cancer. The fathers showed an increase in the occurrence of esophageal cancers, and the entire result has been ascribed to an inherited tendency to the development of cancer of squamous epithelium. It would, however, seem a more probable explanation that in spite of all precautions there has been a difference in social level between the cervical cancer patients with their families, and the families of control persons. Brobeck, in his very thorough analysis of the material, found a percentual increase of uterine cancers and a "corresponding" decrease of mammary cancers among relatives of patients as a whole, which would seem in conformity with such an assumption, made on the basis of later experience.

Thus, it would seem safe to conclude that, so far, no evidence has been produced indicating that heredity plays any part in the etiology of cervical cancer, and that future studies in this field will have to pay full attention to the remarkable social differences in its occurrence.

(g) Age in Relation to Cause

But, also, the age distribution curve for this disease should be analyzed with a view to etiology and pathogenesis.

The fact that the curve for cervical cancer in Fig. 2 takes its downward course from the age of the menopause seems inconsistent with the idea that birth lesions and subsequent cervicitis represent the main and direct cause of the disease. In that case, we would expect a continuous rise, unless we assume that hormonal effects enter the pathogenetic process. This has been suggested by Maliphant who discusses the possible influence of estrogen on epithelium affected by infection. It is noteworthy that Maliphant, among 1,200 consecutive cases from Cardiff Royal Infirmary, finds a continuous rise of the cancer hazard until the age of 60, from which age he sees a steady decline. Provided that this material is representative of all cases occurring in Wales, the difference from the Danish curve would seem to make further studies on age distribution and on latent periods worth while.

The decline, following the menopause, of the Danish curve for cervical cancer suggests the cessation of some causative factor. Either the factor itself must be eliminated by the cessation of fertility or it is frustrated in its effect by the latter. This would be the case if the involution of the uterus could be assumed to eliminate the supposed favouring effect of cervicitis on carcinogenesis, although it is difficult to see why a similar effect should not be found on the occurrence of endometrial cancer.

To the present author it seems beyond dispute that cervical cancer in its development is subject to the influence of hormonal factors to a considerable extent. But it seems difficult to accept estrogen as the responsible agent for both cervical and endometrial cancer in view of the marked difference in their age distribution. The production of uterine cancer in mice by means of estrogen, achieved by Allen and Gardner, applies to cervical and not to endometrial cancer, and indicates an important part played by this hormone, although we do not at the moment know whether these results apply also to cancer in women.

In attempting a synthesis of the evidence available, we must admit that histological evidence on the relation between cervicitis and cervical cancer is inconclusive. There are indications of important hormonal influence on the development of the disease, and the latter shows a definite relation to sexual activity, consequently being more frequent among women who have given birth to children. The dependance of cervical cancer on social level seems, however, just as close, and we can now exclude that the influence of social factors should be exerted via childbirth only. If the latter is to be considered more of hormonal than of mechanical importance to the development of cancer, we must logically include all pregnancies as disposing factors, so that also abortions should be counted as predisposing. This might possibly explain some of the social differences. Also the influence of married life, as such, might have to be considered more from hormonal points of view than on the basis of the smegma theory.

Mammary cancer shows a slight tendency to be inherited, particularly in the breast of homologous side. It is subject to discussion whether relatives of breast cancer patients show an increased tendency to development of other cancers. Also, mammary cancer is conditioned by hormonal factors in a way that seems to hamper its development in married women, and, usually, but not invariably, it shows an inverse relationship in frequency to cervical cancer.

It is striking that human breast cancer decreases in frequency with marriage, while mammary cancer in some strains of mice increases in frequency with births, and it seems to deserve attention whether the mouse affection is a true model of human cancer.

It would seem that further studies on an actuarial basis, on the frequency of mammary cancer with relation to marriage, childbirth and social status could still give interesting information, provided they were combined with simultaneous parallel studies on cervical cancer.

Disposition to Cancer as Such?

It is fundamental to our view on the etiology and pathogenesis of cancer whether there is a disposition to cancer as such, or whether we must regard it as a purely local disease.

It was originally pointed out by Cramer that the total mortality from cancer seemed to be more or less the same in England, Holland, Switzerland and Japan. But the distribution on site of this apparently constant amount of cancer varied considerably from one country to another. Also, the total cancer mortality for men and women is more or less the same, in spite of the considerable difference in sites affected. Cramer's suggestion was that there might be a tendency to the development of cancer in general, while local circumstances, as for instance occupation or similar conditions, would determine the site in which cancer develops.

The contrary theory would naturally be that cancers are purely local affections or reactions to local insults, with no etiological factors in common with similar affections in other sites. A third possibility was voiced by Stern, who pointed out that skin cancer probably had an etiology different from the other, "glandular" cancers, or, in other words, some cancers may have etiological factors in common, while others were determined by different factors.

Even if it may be tempting to dismiss Cramer's theory, it has to be realized that suggestive evidence in its favour is produced from time to time.

Studies by Clemmesen and Busk on cancer mortality among men and women in Denmark, England and Switzerland—with a view to this theory—could point to differences both between the countries and, between male and female cancer. It seemed that the differences between countries with regard to female cancers of "inaccessible" site could be accounted for by gastric cancer alone, while the female cancers of accessible sites showed some differences. For male cancers it proved impossible to make single sites responsible for the differences found, but it appeared that in Switzerland there was a considerably higher mortality from both esophageal and gastric cancers than in Denmark or England.

On the whole, however, differences were only small. But it is surprising that the differences in cancer incidence between the sexes is not more pronounced when it is realized that 36 per cent of all female cancers in Denmark are localized in breast and uterus, and only eight per cent of male cancers are localized in the genital system.

Direct evidence in favour of Cramer's theory is found in the famous "Family G." of Warthin. Among 173 members of this family, 43 carcinomata developed in 41 persons. All the male cases showed tumors in the intestine or the stomach, while 15 of the 23 female cases were adenomata localized in the endometrium, as shown by Hauser and Weller.

Jacobsen's finding that relatives of patients with mammary cancer show a tendency toward an increased occurrence of cancer in other sites except the skin seems to support Cramer's theory, while Brobeck saw no similar phenomenon for uterine cancer.

A third study pointing to some unknown relationship between adenocarcinomata of various sites has recently been published by Helen O. Curth, of New York, but here the interpretation of findings is more difficult.

Acanthosis nigricans is the name of a cutaneous affection occurring in two different forms. One form which sometimes develops on a genetical basis, usually starts at puberty, obviously strongly influenced by hormones. The second form usually develops in older persons and is invariably accompanied by an adenocarcinoma, most often in the intestinal tract (92 per cent), or in the lung or the breast. This is evidence in favour of a connection between adenocarcinomata of different site, although the possibility remains that they may have effects but not causes in common.

Wolff showed in 1939 that mortality from cancer among Jews in Berlin was slightly lower than among other Germans. However, the per cent of uterine cancer was distinctly lower in Jewish women than among other Berlin women.

Even a recent study by G. F. Findlay on cancer in African recruits showed an incidence of cancer, in general, very similar to the European. But it is evident from the figures that primary liver cancer occurred with a far higher frequency among the Negroes than in the European populations where other cancers seem to substitute them.

Taking his start from Jacobsen's observations on breast cancer, Feilberg has, in the Danish Cancer Registry, examined the risk of a new primary cancer in women once recovered from breast cancer. It had been stated, also, in Denmark that cervical and mammary cancers would show an increased tendency to occur in women once cured for either of these diseases. Such earlier studies have, however, suffered from the lack of knowledge with regard to the cancer risk at various ages. Since both cervical and mammary cancer begin to appear rather early in life, and are cured in a relatively high proportion of cases, the risk of another of these cancers must, consequently, be heavier for such patients than for other cancer patients who most often die within a year or two after their disease has been diagnosed. But this does not imply that the risk itself is greater than for any other woman in the population. Similar objections can be made against all the other previous studies of similar kind.

Feilberg's studies—so far unpublished—show that patients suffering from mammary cancer stand no greater risk of developing a new primary malignant growth than other persons. A final answer to the question valid for cancers of all sites will, however, demand a greater amount of material than available at the present time, and will require a continued registration of cancer cases over a longer period.

From the review given, it will appear that knowledge on human cancer is becoming sufficient as a basis of research—even if we shall have to wait for many final answers until methods have been developed for the estimation of the level of various hormones in the human body.

The theoretical knowledge on cancer is now so extensive that it would seem the time is approaching for the selection of those fields of study that are most likely to furnish an approach to practical problems. It is, however, highly doubtful if experimental studies on animals will give us information on cancer in man, which cannot easier and, thus, less expensively be obtained by studies on human cancer. It is characteristic that most of the progress with regard to human cancer has been made on a practical basis. Radiotherapy was developed on an empirical basis. Percivall Pott's chimney sweeps cancer provided the starting ground for extensive theoretical studies, but the Danish Chimney Sweepers Guild, which in 1778 ruled that journeymen and apprentices should have their daily bath may, whatever their motives, have done more to prevent cancer than many research workers.

With regard to the present field of study, it is a great step forward that work has been started in the WHO on the standardization of nomenclature, etc., and that the well-known work of the League of Nations on staging of cancer has been carried on, both by the International Radiological Congresses and the International Cancer Research Commission.

As early as 1846, Walshe could report on cancer figures from London going as far back as 1728, and discussed the occurrence of cancer in Copenhagen, Hobart, Calcutta, China, Egypt, Algiers, Senegal, New York and Massachusetts. At that time, medical diagnosis was far behind the statistical methods, which in the papers of Walshe, Stern and Sibley are superior to most modern publications on cancer demography. But the time seems now to have come for abandoning the interesting but loosely founded statements that cancer of one or another site seems more frequent than usual in one location or another. Workers on the geographical pathology of cancer have joined with students of the demography of cancer at the C.C.I.C.M.S. Conference in Oxford, July, 1950, in order to obtain solid foundations for such statements.

Even so, we have not reached that stage of synthesis which is characteristic already in the conclusions of Stern. It will be necessary to adopt a still wider view in our efforts in the research on the etiology and pathogenesis of cancer—or better the endemiology of cancer—than permitted by separate headings like "cancer statistics" or "geographical pathology of cancer." Many modern communities have realized the enormous proportions of the cancer problems and have allocated large sums, usually spent on research of cancer in animals. It will be up to the medical professions, especially in the fields of pathology and clinical medicine to claim their reasonable share of the means available for research on human cancer, and to go ahead with the skill and courage displayed by experimental workers in their gigantic struggle to fight the cancer in the mouse.

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Gynecology

Dysmenorrhea

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Dysmenorrhea has been defined as "painful and difficult menstruation."[1] It is divided into primary, essential or congenital dysmenorrhea in which there is no demonstrable pathological cause for the condition and secondary or acquired dysmenorrhea in which some direct pathological entity may be found to account for the complaint.[2] This symptom complex is an important cause of invalidism on this continent. Harman[3] states that 45% of women suffer to some degree from disability at the time of their menses and in some 16% this is of a serious nature. He estimates that the loss of work annually in the United States is equivalent to the time missed by 58,000 women unemployed for 1 year. It is well recognized to be a frequent gynaecological complaint. Much investigation, without great results, has been done into its origin and treatment in the past 100 years. It is interesting to note that there seems to be some racial or geographical influence affecting the incidence of the condition. It occupies a prominent part in American gynaecological literature, whereas in Britsh or continental periodicals it is accorded scant notice. It might be suggested from this that the more pampered or protected women are those most prone to dysmenorrhea, their more phlegmatic counterparts having less difficulty.

Primary Dysmenorrhea

As the great bulk of cases fall into this group, we shall consider primary dysmenorrhea first.

It usually begins at, or shortly after, the menarche. The symptoms complained of appear 24 to 48 hours prior to the period and characteristically are those of a cramplike, colicky pain, low in the midline of the abdomen. This may and frequently does radiate into the thighs and lumbosacral region. Nausea, vomiting and other secondary symptoms are a frequent accompaniment of the pain. They usually reach a maximum on the first day of flow and subside thereafter; rarely does the pain persist throughout the whole period.

Etiology

Many explanations have been given for the causation of primary dysmenorrhea. None are completely satisfactory. Obstruction to free flow of menstrual blood, malposition of the uterus, hypoplasia of the uterus, endocrine, psychogenic and constitutional factors have all been accused at one time or another. No single theory will explain all cases.

Obstruction, malposition and hypoplasia of the uterus are now considered of scant importance. The first, because one can frequently demonstrate the absence of obstruction at the time of flow, whereas many women with small or tortuous cervical canals experience no pain. It follows that dilatation and curettage are rarely of more than temporary value. Malposition, with the possible rare exception of the occasional puerperal retroversion, is rarely associated with dysmenorrhea. Hypoplasia is difficult to demonstrate with any certainty and its role in the production of pain seems extremely questionable.

Endocrine Factors

The newer knowledge of endocrinology suggested a fruitful field for exploration and unfortunately in some instances, for exploitation. The association of endocrine imbalance with impaired circulation and disorganized muscular action of the uterus has been accepted by many authorities. It seems certain that primary dysmenorrhea never occurs in the absence of ovulation. In this respect the work of Sturgis and Albright[4], Haus[5], Wilson[6] and others has been confirmed by the clinical management of a significant number of patients.

Psychogenic Factors

The unfortunate effect of inadequate understanding of the nature of menstrual function leads to fear and pain. The oversolicitous mother often implants the seed of dysmenorrhea in the ill-informed adolescent. It is these patients who provide the great mass of those who seek relief. Understanding explanation and sympathetic reassurance commonly result in substantial improvements.

Constitutional Factors

Constitutional debility, anemia, overwork and poor nutrition, associated usually with some neurotic or psychic factor, cause a considerable amount of disability. The correction of physical disorders will in a certain proportion of these cases result in satisfactory relief.

Fascial Contractures

The work of Ayer and Usher on fascial contractures as a cause of visceral pain has been emphasized by Billig. The use of exercises to correct or overcome these contractures has proven useful in many instances in the experience of Harman and others.

The diagnosis rests upon the presence of symptoms in the absence of any detectable pathological changes in the pelvis.

Management

For the purpose of classification dysmenorrhea may be divided into three groups:

1. Mild—those with minimal discomfort of short duration.

2. Moderate—those requiring sedation.

3. Severe—those with sufficient disability to bar them from work and require bed rest.

All three groups require painstaking complete histories with emphasis upon psychological factors which may be responsible for their disability. A thorough, careful and complete physical examination which must include pelvic and rectal examinations is essential. Correction of any constitutional disability together with firm reassurance will go far in many instances to provide relief. The removal of any cervical obstruction may help in a small proportion of patients; in such instances dilatation and curettage are justifiable. Today stem pessaries are considered to be of little value. The use of mild sedation in the form of phenobarbital gr. ¼ is good therapy in all cases. Rarely narcotics in the form of codeine may be justifiable in certain individuals for a limited period of time.

Hormonal Therapy

The use of stilboestrol or other estrogenic preparation from the 5th to 24th day of the cycle will produce an anovulatory cycle and a painless period (5, 6, 7) in from 75% to 100% of patients. The relief is only for this period and the treatment should not be persisted in for more than 2 or 3 months. The reason for this is that stilboestrol neutralizes ovarian function and may produce menorrhagia culminating in amenorrhea. The use of a combination of progesterone and estrogen has been advocated by Novak with satisfactory results in some instances. Testosterone may have value in its inhibiting effect upon uterine musculature but the unpleasant risks in using this hormone in women are the development of a male distribution of hair and a bass voice. These limit its application materially.

Exercise

The most simple, and in my hands, the most uniformly successful therapy, has consisted in the application of exercises to overcome fascial contractures as suggested by Ayer and Usher and practised by Harman. They are simple to perform but require persistence in order to achieve results. One usually notes improvement with the first period and in 85% to 90% of patients complete relief is achieved by the third period. It is necessary, in my experience, to continue indefinitely with the exercises. Others feel that if they are done regularly the week before menstruation, satisfactory relief can be obtained in the majority of women.

Presacral Neurectomy

This treatment should be reserved for patients in which all other methods fail. It is rarely required and the results obtained are not consistent. It is a procedure which is not without risk and a definite mortality accompanies its performance. Curtis, O'Donel Browne[8] and others have found it to be a successful and justifiable therapeutic procedure.

Secondary Dysmenorrhea

The common findings in this type of dysmenorrhea are chronic pelvic inflammatory disease, endometriosis, fibromyomata uteri and other pelvic lesions. The treatment is the correction or removal of the pathological condition which is considered to be causative. In this respect Torpin[9] questions whether the clinical findings can always be held responsible for dysmenorrhea. He cites Counsellor's experience that only 47% of patients with gross endometriosis complained of dysmenorrhea. He advises objective and thoughtful consideration of all cases before surgical intervention. It is in this group that presacral neurectomy may well have its greatest field of usefulness. Where the symptoms have been severe and the pathological findings limited, presacral resection with the correction of pelvic lesions may provide a greater cure rate. To ensure satisfactory end results the operation must be complete and thorough. Some authors suggest the implantation of the proximal end of the chain on the peritoneal surface to prevent regrowth.

Summary

The rather unsatisfactory results in the management of dysmenorrhea are understandable by reason of the multiplicity of factors involved and our inadequate knowledge. Greater understanding of the nature of menstruation and its significance, with better instruction of younger girls should reduce its incidence. The realization that psychogenic and constitutional factors play a large part in its etiology should be appreciated and every effort expended to alleviate these conditions. The dangers of hormonal therapy and the disabilities attendant upon its usage have been noted. In my hands, good results have been obtained by explanation, strong reassurance, mild sedation and a programme of corrective exercises (Ayer and Usher). A wider trial of these procedures seems indicated. Presacral sympathectomy is rarely necessary in primary dysmenorrhea. The use of this treatment should be limited to extremely severe cases or incorporated as part of the management of secondary dysmenorrhea.

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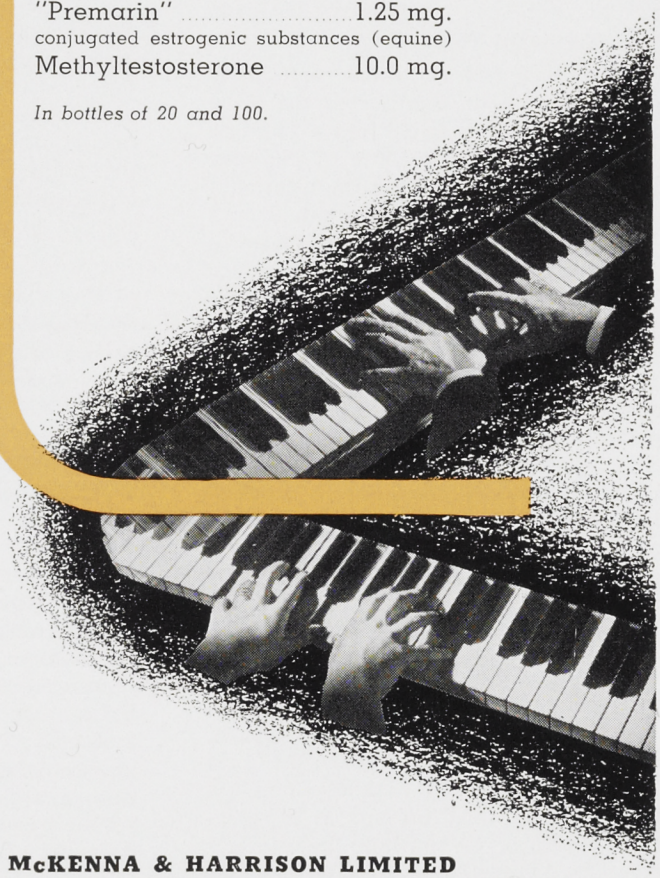

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Case Histories—Surgical

Procidentia

Vaginal Hysterectomy

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This is the seventeenth of a series of Case Histories which will appear in the Review each month. The purpose of these publications is not to present rare or unusual cases but rather to consider the routine management of common surgical cases.

Case No. 46-12,782. Mrs. L. P., St. Boniface Hospital. Color, white. Age, 64. Occupation, housewife. Date of admission, October 14, 1946. Date of operation, October 15, 1946. Date of discharge, October 29, 1946.

Complaint on Admission

1. Swelling hanging out between thighs, 15 years.
2. Passes urine on straining, laughing or coughing, 3 years.
3. Heaviness and a feeling of pressure in the pelvis, 2 years.
4. Backache—dragging, 1 year.
5. Feeling of general weakness, 1 year.
6. Blood spotting down below, 2 weeks.

Present Illness

Her complaint dates back to the birth of her second baby, when a doctor took it with instruments. She felt quite well, however, and did not complain. Within the past 2 years (since 1944), she felt that her back was getting tired and ached in the evenings, and she had a feeling of fullness and pressure in the perineum. She was feeling more tired generally. Within the last few months she was annoyed by the urinary incontinence which would occur after straining, laughing or coughing. About a year ago she noticed a swelling in the perineum but thought it was a hernia and did not pay any attention to it. On October 1, 1946, she noticed spotting of her clothing with blood. This occurred almost every day. She then decided to see a doctor, because she felt that it might be the beginning of a malignancy.

Inventory by Systems

Eyes—Vision fair. Wears glasses for reading.

Ears—Hearing good. No tinnitus.

Respiratory—Does not get colds. No cough, expectoration or haemoptysis. Does not get short of breath on exertion.

Cardio-vascular — No retrosternal pain. No palpitation. No dyspnoea. No dependent oedema.

Gastro-intestinal—Appetite good. No dyspepsia. No nausea or vomiting. Gradually increasing constipation for past 2 years. Resorts to laxatives. No blood in stools.

Genito-urinary—Nocturia twice a night. Some urinary incontinence on straining, laughing or coughing. Frequent burning sensation on micturition. No haematuria. A heavy feeling in the perineum.

Menstrual—Menarche at 13 years of age. Interval 28 days. Duration 3-5 days. No dysmenorrhoea. Menopause at 42 years of age. No postmenopausal bleeding until October, 1946. Has continuous mild vaginal discharge with some pruritus vulva. A feeling of heavy pressure in her perineum.

Obstetrical—Para iv, gravida iv. First baby spontaneous delivery—normal. Second baby was delivered by forceps—difficult labor with laceration of the cervix and perineum. The other two babies were born spontaneously without a doctor attending.

Nervous system—Very occasional headache. No irritability or depression. Very bright and happy outlook on life.

Musculo-skeletal—Apart from being over-tired and weak in both limbs at night, she has no other complaints. No disturbance of gait. No tingling or numbness of legs or cramps in the calves. Feet warm.

Metabolic—No loss of weight. No pyrexia. Well nourished. No heat or cold intolerance.

Past History

Usual childhood illnesses. Felt perfectly well until delivery of her second child by a doctor who took the baby with forceps and at that time it took her several months to regain her strength. Inguinal herniotomy—1944—complicated by pneumonia and pleurisy. No history of any other illnesses, operations or accidents.

Family History

Mother and father both died of old age—does not know the cause or age of death.

No brothers or sisters.

Husband—Alive and well.

Four children—ages 24 to 35—all well.

No history of tuberculosis, malignancy or insanity in family.

Physical Examination

A gray-haired, happy, well-nourished woman, in very good spirits, sitting quietly in a chair.

Head and Neck:

Cranial nerves—Intact.

Eyes — Lids, conjunctivae and corneae all normal. Pupils react to light and accommodation. Ocular fundi normal.

Ears—Normal.

Nose—No obstruction.

Mouth—Tongue moist. Teeth false.

Neck—Thyroid gland—small irregular adenoma in the left lobe. No lymphadenopathy. No distended veins.

Chest:

Heart—Apex beat 3½ inches from midline, in the 5th interspace. Heart sounds strong and regular. 78 beats per minute. No murmurs. No extra systoles. Blood pressure 125/75.

Lungs—Chest normal in contour. Movements equal and symmetrical. Tactile fremitus good. No dullness on percussion. Breath sounds normal. No adventitious sounds.

Mammae—Fairly large breasts. Symmetrical and uniform in size. No discharge from, or retraction of nipples. No masses felt. No evidence of chronic mastitis.

Abdomen—Somewhat lax, with slight distension. Right inguinal herniotomy scar. No tenderness. No masses. No dilated veins. Liver and spleen not palpable.

Vaginal examination—Cervix protruding at the introitus; lacerated, eroded, studded with Nabothian cysts. Lips everted. Posterior lip elevated. Mucoid discharge from the cervix. Cervix bleeds readily when touched, but there is no evidence of any ulceration or induration. Introitus very lax. Cystocele grade iii. Rectocele grade iii. Perineal body almost completely gone with marked scarring in the perineum. On bimanual examination, the uterus appears to be enlarged to about the size of a 2½ month pregnancy with an egg-sized mass felt in the right lateral wall. The uterus is freely movable and can be drawn outside the introitus for about 2 inches with the fingers.

Rectal examination—Fairly marked external haemorrhoids. No masses felt on digital examination.

Spine — Normal curvatures. Normal movements. No tenderness on percussion. No bed sores.

Extremities:

Upper—No wasting. No clubbing of the fingers.

Lower: No deformities. No wasting. Good color. No oedema or ulceration. Vibration sense good. Pulsations in the dorsalis pedis and posterior tibial good.

Reflexes—Normal and intact.

Clinical Laboratory

Blood Count—Red cells, 4,470,000. Hemoglobin, 94%. Color index, 1. White cells, 8,300. Differential — Polymorphonuclear neutrophiles, 70%. Small and large lymphocytes, 30%.

Blood Wassermann—Negative.

Urinalysis—Color, amber. Reaction, acid. Specific gravity, 1.022. Albumin, 0. Sugar, 0. Microscopic, negative.

Biopsy of cervix—Chronic endocervicitis. No evidence of malignancy.

Roentgenologic—Plain film of the kidney, ureter and bladder areas. Kidneys are normal in size, shape and position. No shadows are seen to suggest calculi. There is no radiographic evidence of any abnormalities of the bones of the pelvis and lumbar spine.

Pre-operative Diagnosis

Procidentia of the uterus. Cystocele. Rectocele. Uterine fibroid.

Indications for Operation

Pelvic discomfort, backache, general lassitude, urinary incontinence, and blood-stained leucorrhoea all warrant operation. The presence of the fibroid along with the large eroded cervix make total hysterectomy the procedure of choice. The age of the patient, the small size of the uterus, and its mobility, make vaginal hysterectomy the ideal operation here; especially so when adnexal pathology is absent, and no previous operative interference attempted.

Pre-operative Care

Full permission for any type of pelvic operation. Hospitalization 24 hours pre-operatively. Enema h.s. and a.m. pre-operatively. Preparation of operative field—the perineum and vagina are washed and scrubbed with soap and water. Two vaginal douches given the day before the operation. Two vaginal paintings with mercurochrome follow the douches. A sterile pad is applied. Catheterized 20 minutes pre-operatively.

Description of Operative Technique and of Operative Findings

1. Lithotomy position.

2. Preparation of the operative field after the induction of anaesthesia.

Perineum is scrubbed with soap and water, and the vagina douched with 1:5000 bichloride of mercury solution.

Cleansed with ether, painted with merthiolate over perineum, lower abdomen, and thighs, and vaginal walls.

3. Draped.

4. Re-examination of the pelvis while under anaesthetic (relaxation).

5. Slight Trendelenberg position.

6. Operative Procedure: The cervix was seized with a tenaculum and traction applied.

Incision

An inverted T. incision was made through the anterior vaginal mucosa. The flaps of vaginal mucosa were dissected laterally. The bladder was then dissected from its attachment to the cervix at first by sharp dissection with scissors and then by finger gauze dissection up to the vesico-uterine reflection of the peritoneum.

The cervix was lifted forward to expose its posterior aspect. The transverse limb of the inverted T. Incision was carried posteriorly completely encircling the cervix. The vaginal mucosa over the cul-de-sac was now dissected off; with scissors an opening was made into the peritoneal cavity. The utero-sacral ligament on the left side was put on stretch, doubly clamped and transfixed, and ligated with chromic i ligature. The uterus was drawn still further downwards, and the left uterine vessels were clamped, transfixed and ligated. A third set of clamps was

applied to the broad ligament, which was cut and ligated. A towel clip was hooked into the posterior aspect of the body of the uterus, drawing it down and at the same time, the index and middle fingers of the left hand were swept around behind the uterus and over the fundus to appear in the uterovesical pouch of the peritoneum. With this pouch stretched over the tips of the 2 fingers, an incision was made through the peritoneum at this point, thus entering the utero-vesical space of the pelvic cavity. The fundus of the uterus was now delivered out of the vagina and the remaining portion of the broad ligament including the ovarian ligament and fallopian tube were clamped, cut and ligated. The uterus was then pulled over to the left, and the right uterosacral ligament, broad ligament and ovarion ligament were clamped, cut and ligated as on the left side. The peritoneum was now grasped with Allis forceps and a purse-string suture of chromic catgut i was inserted. A rubber Penrose drain was inserted into the cul-de-sac and the purse-string tied loosely around the drain.

Repair of Cystocele

The cut edges of the mucous membrane of the anterior vaginal wall were now grasped with a series of Allis forceps and the mucosa still further dissected free from the base of the bladder. Several interrupted chromic mattress sutures were inserted into the pubo-cervical fascia and tied together forming a support for the bladder. The utero-sacral ligaments are now tied together in the midline. The redundant vaginal mucosa was then resected. The mucosa of the anterior vaginal wall was next approximated by interrupted No. 0 plain cutgut sutures. The mucosa in the vault was closed up to the Penrose drain.

Repair of Rectocele

Two Allis forceps were applied on either side of the scar in the perineum. With a pair of sharp curved scissors this scar was completely excised. The vaginal mucosa over the rectum was then raised and dissected with finger gauze to the apex of the rectocele.

The redundant mucosa was excised.

The perirectal tissue was drawn together from above downward by several interrupted sutures of chromic catgut. The levatores ani were then brought together by 3 interrupted sutures of chromic catgut.

The mucosa of the vaginal floor was now closed, seizing a portion of the perirectal tissue in each stitch to prevent dead space, and tied at the perineal body. The skin was approximated in the midline by a continuous chromic 000 suture.

The size of the vaginal opening was now re-examined. Two and a half gms. of sulphanilamide crystals were dusted into the vagina. The Penrose with a safety pin was strapped to the labia majora.

A retention catheter was inserted into the bladder.

A perineal pad was applied.

Anaesthetic

Pre-medication—Nembutal gr. iss. a.m. and h.s. Morphine gr. 1/6 with atropine gr. 1/150 1 hour pre-operatively.

Position—Lithotomy.

Condition of patient—Pulse, 72. Respiration, 20. Blood Pressure, 125/75.

Agents—Metycaine 130 mgm. in total 2.8 cc. as spinal anaesthetic.

Stimulants—Ephedrine gr. 3/8.

Remarks—Penrose drain left in the vagina. No packing. No haemorrhage.

Gross and Microscopic Description of Tissues Removed

Tissue No. 5104-5.

Vaginal Hysterectomy—Body globular and of large walnut size; from cornu protrudes a hard, white fibroid, 3.5 cm. across. Uterine mucosa smooth, yellowish and thin. Cervix is relatively enlarged; posterior lip elongated and thick. No ovaries received.

Microscopic—Benign senile uterus. (Dr. Prendergast, Pathologist).

Final Diagnosis

Procidentia. Uterine fibroid. Endocervicitis.

Progress Notes Including Post-operative Care During Stay in Hospital

October 15, 1946 — Immediate post-operative condition good. Pulse, 84, fairly strong. Respirations, 20. Blood pressure, 125/75. Foot of the bed raised 12 inches. Very slight vaginal bleeding. Catheterized, 250 cc. Moved frequently from side to side. Perineal wound, no douches or irrigations given at any time.

October 16, 1946—Resting well.

October 17, 1946—Catheter removed. Voided 200 ccs. Slightly nauseated. Condition favorable. Penrose drain removed.

October 18, 1946—Liquid diet. Propped up in bed. Perineum sprayed with mercurochrome 2%. Olive oil retention enema.

October 19, 1946—Cascara drams 2.

October 22, 1946—Up to the bathroom.

October 29, 1946—Discharged from the hospital.

Condition on Discharge

Improved.

Patient was able to walk from the hospital quite freely, without complaints.

The perineum was not completely healed along the line of the superficial stitches.

Follow-up Notes Since Leaving Hospital

February, 1947—Patient reported for a check-up. Pelvic examination was done. Introitus admits 2 fingers easily. Vaginal canal good length. Walls appear well supported.

March, 1948—Questionnaire sent out to patient. Reported completely free of previous symptoms. Has had no incontinence or backache, and feels quite satisfied and happy.

Editorial

J. C. Hossack, M.D., C.M. (Man.), Editor

Totty of the Must

This is the month big with the fate of our Convention.

For your information we are giving you summaries of the papers to be given. We hope that these will whet your appetites to hear the speakers enlarge upon them. We hope later on to give you a chance to read these communications but the fact that you may do so in the future is no reason why you should absent yourself now.

"Reading maketh a full man," said Francis Bacon but "conference a ready man." The chief benefit of hearing a presentation often lies in discussion, for then obscure points can be clarified and personal applications directly explained.

You will find that entertainment has not been neglected. It would help so much if we knew before hand the sort of amusement you would prefer. I am sure we could cater to every taste, even to that of those who are interested in what has been called non-medical osteology. This is a subject of which I myself have no knowledge but I understand it is a sort of game in which a mysterious personage called "Little Joe" does something with the eyes of snakes. I'm not an ophthalmologist so naturally I wouldn't know.

Then there may be others whose avocational pursuits are of a different sort. For example, there may be among you some who hold decided opinions upon the identity of the Dark Ladye of Shakespere's sonnets; or who have theories of their own as to how exactly Eupompus gave splendour to art by numbers; for, as I need scarcely tell you, the explanation of Zuylerius (Senior) has not been universally accepted. Or perhaps all you want to know is how to cook a steak or catch a fish or sew on a button. If you will tell us what you want to discuss we'll find a group, if you will tell us what you want to learn we'll find a teacher, if you tell us what you want to do we'll find ways of satisfying you.

Totty of the Must? Oh yes. You'll find it in Spencer's "Faerie Queen,"

Then came October, full of merry glee;
For yet his noule was totty of the must,
Which he was treading in the wine-fat's see,
And of the joyous oyl, whose gentle gust
Made him so frollick and so full of lust:
Upon a dreadful Scorpion he did ride,
The same by which Dianae's doom unjust
Slew great Orion: and eke by his side
He had his ploughing share and coulter ready tyde.

Totty of the must is the earliest preliminary of what may end in a hang over. As such things don't happen in our circles, which must and joyous oyl seldom enter, it need concern you no longer. It has done its duty if it has coaxed you to heed this invitation to the Convention.

A Useless Little Book

Every now and again I glance over my bookshelves with the purpose of ejecting those volumes which have outlived their usefulness. I have too many books that time has rendered obsolete. Indeed, nothing is more ephemeral than a medical work for, almost before it has left the press, the most recent advances have already made it obsolescent. The burning of books is repugnant to me, however, and I am in no hurry to reduce my old friends to ashes even though these same ashes may, by the processes of nature and of time, become changed into other books for other generations.

And so the process of elimination is a slow one. Each pensioner utters its own mute appeal for consideration. There were the circumstances under which I acquired this, the help which I have received from that, the pleasure I have derived from another. I glance through a fourth and find something of interest that I had previously missed, a fifth promises that it may still be of value under circumstances which so far have not arisen. The condemned lie meekly before me and I,with equal meekness, as often as not, reprieve them to their accustomed places.

At the moment I have before me one that has really no excuse for living. It is a little book of prescriptions dated 1915 and was, at that time, very highly recommended. Indeed, it is prefaced by a most flattering testimonial penned by an eminent and titled member of the profession. I am not sure if students still buy books of prescriptions but in the past they evidently did for this is the tenth edition of the work in question.

It may be interesting to those who have been born and bred in this age of therapeutic marvels to learn somewhat about the remedies of a generation or two ago. "How," ask many students, "did people manage to survive in the days when the sulpha drugs, the antibiotics, the antihistamines, etc., were undreamed of?" Yet survive they did and in this little book we have some hints as to how the doctors helped them.

By chance the book falls open at Caulophyllum. Tell me, gentle and learned reader, do you know anything about caulophyllum? Or are you merely a gentle reader and not at all learned in this matter? Then let me remove your ignorance. Caulophyllum thalictroides (known to the vulgar as Blue Cohosh) is a plant which belongs to the

natural order Berberidaceae, a fact that was of considerable importance to candidates at examinations some decades ago.

Unlike your modern man-made remedies (which must, of course, in this age of specialism be specialists themselves) caulophyllum is a good old fashioned family doctor kind of remedy. It is prepared to tackle almost any problem; to arise to almost any occasion. My little book informs me that it is a diaphoretic, a diuretic, an anthelmintic, an emmenagogue and a parturient. No wonder that the black cohosh rears its head proudly above the other herbs of the field, for what other (anatomical and physiological conditions being right), can simultaneously make a patient sweat, pee, pass worms and have a period or, if too late for that, a baby?

There, gentle and now less-unlearned reader, is a drug as is a drug! Name just one of your new-fangled synthetics that can hold a candle to it! And yet, alas, blue cohosh has fallen into desuetude; caulophyllum has passed into oblivion; for even you, until a moment ago were ignorant of its very existence. And into oblivion has fallen also the black cohosh, but this time more deservedly because in versatility it falls far short of its blue namesake. Our author says of cimicifuga racemosa "it is credited with anodyne, anti-rheumatic and anti-neuralgic properties." Just "credited," and I am afraid its credit is not very good because in the appended prescriptions salicylates are included in large dosage.

A much more worthy associate of caulophyllum is Dorema Ammoniacum, an umbelliferous plant which sheds resinous tears, yellowish in color. These tears, also, are diaphoretic, diuretic and emmenagogue in their action and are to be preferred to caulophyllum when there is no need to worm the sweating, urinating and menstruating (or parturient) patient, but where instead you want to make her cough and stop having spasms. Both drugs can be used on males but obviously for physiological reasons will then fall short of their maximum efficiency.

Now, it is possible that sometime you will come across the name Eugenia Jambolana. Should you do so do not jump to the conclusion that this belongs to the newest star in the Hollywood firmament. Actually it is the official name of Jambul, a product of the East whereof the seeds are "credited" with the property of arresting the formation of sugar in diabetes, while the juice of the fresh bark and leaves is used as an astringent in diarrhoea. In other words Eugenia at one fell swoop puts an end to innumerable excursions to the bathroom. Were it to undergo a revival at the hands of an enterprising manufacturer, in no time you would see in every lavatory a sign reading, "Was this trip necessary? If not use Jambo." Or something of the like.

One cannot think of Jambul without at the same time thinking of Sumbul—Ferula Sumbul, a distinguished member of the Umbelliferae. The careful author does not say that it **is**, but only that it is **given as** "a nervine stimulant and antispasmodic." Possessed of a disagreeable musk-like smell, it frequently found itself associated with valerian, assafoetida and other malodorous members of the materia medica, in mephitic brews wherewith, it was hoped, hysterical young women might be brought to their senses.

Although it also has passed out of daily memory, I think that Euonymus atropurpureus is worthy of mention. An illiterate female one day sent her little girl to the drug store with this note: "Please give my gurl somting to remove bowels." Well, euonymus could do just that. The dose had to be carefully regulated upwards from small beginnings. It was as in the old rhyme "Jeremiah blow the fire, puff, puff, puff; first you do it gently and then you do it rough."

Perhaps the most interesting thing about euonymus is its common or garden name—wahoo. This may be a misspelling of Yahoo and in either case probably got its origin in the anguished (YAHoo) of a sorely constipated native during the drug's operation, and the later triumphant (yaHOO) as he gazed upon the copious evidence of its potency.

About Coca and Kola we need say no more than that they have little to do with the beverage that combines their names. Nor is there much point in setting out the differences (which include almost everything but name) between Turpeth and Turpeth Mineral. Between them they have worn out many a good gut as was the case with not a few of the older remedies. In fact purgation and emesis were effects desirable alike to doctor and patient for both gave visible evidence that something had been accomplished, and both were fairly easy to effect, and, moreover one or other was expected.

I heard once of a quackish and unlettered practitioner who thus told his method of treating abdominal pain: "If the pain is below the belly-button I purges them, and if it's above the belly-button I vomits 'em." "But what" asked an interrogator, "if the pain is in the middle?" "Then," he answered, "I does both."

He, of course, was an untrained practiser. For those whose hearts were in their work the composition of a prescription differed not greatly from the composition of a piece of music with drugs taking the place of notes. First one had to decide upon a basis and this might require the assistance of one or more adjuvants. Almost certainly would a corrective or two be indicated. All these were incorporated in the appropriate vehicle and rendered pleasing to the eye and, if possible, to the palate.

In addition to the simple considerations of age, sex and size other more mighty matters had to be taken into account, although few found these worthy of application when our little book was compiled. Thus one might have to consider the "signatures" of the plants and the astrological aspects of the planets. Important at all times was a knowledge of incompatibilities, for ignorance here might result in a mixture that looked like mud or like ink; or in one that would blow up in your face instead of releasing its pent up energy "in alvo."

Thus prescriptions, like clothes and shoes, were made to measure. They were personal and impressive. The very circumstances of their compounding were psychologically potent. The patient was awed by the occult characters which he bore to the druggist. The atmosphere of the druggist's shop was heavy with redolence and mystery. Upon its shelves were rows of intriguing bottles with contents of every hue. The genius loci, his hands flitting from flask to flask, added in his measuring glass drops or drachms of emerald or ruby or gold as the instructions demanded, and then withdrew behind the curtain of his sanctum there to complete his magic. Meanwhile the patient would muse upon this arcanum therapeuticum and draw in healing with every breath. All this would generate within him a vast respect for the kenning and skill of his allies, and, beget the assurance that their efforts on his behalf would not be unavailing.

Now the drug store holds no more mysteries. They vanished with the aroma that permeated the shops of the apothecaries. They fled before the hiss of soda fountains and the stench of hamburgers. Now the druggist works openly, counting out ready made pills, tablets and capsules; pouring forth ready made elixirs of whoozis and syrups of whatzis. In college he learned how to roll pills but, for all the use this experience is to him, he might as well have spent the time in rolling bones. The remedies he dispenses bear proper names that few if any can remember such as sodium 3, 3-diamino-4, 4-dihydroxy-arsenobenzene -N- methanol sulfoxylate. We must use pet names for these chemical cacophonies for otherwise we would not be able to prescribe them. Man and not nature is their maker. They are not sought for under the open sky but in the confinement of smelly laboratories.

To be sure there has been a gain in efficiency but have we not suffered some loss? Gone are the days when the physician-cum-botanist-cum-naturalist sallied forth to garner his medicines. Then one might see him passing down shady lanes, lingering in bosky dells, searching by hedge row elms or hillocks green, wandering o'er russet lawns and fallows grey (where the nibbling flocks do stray) or pausing to look and to listen on the banks of shallow rivers by whose falls, melodious birds sang madrigals.

Then home returning refreshed in body and in mind he would sort the herbs and barks and leaves and berries wherefrom he would later prepare tinctures and elixirs, syrups and electuaries, powders and pills, for the healing of the nation.

But we cannot gather our own materia medica today unless we go into mines and abattoirs and then into laboratories; and although this displacement of the druggist by the chemist has been to the infinite advantage of our patients, it has, I think, left us a little poorer for no longer do we come so close to the smiling, sweetening face of nature; no longer are we so strongly made to feel that we are indeed but her pupils and helpers. But all that ended long ago when America still was young and Canada unborn.

Therapeutics has changed vastly since my little book was written albeit organic and biological substances are far from being omitted. But our concepts have changed. Hysteria is no longer treated by offending the senses of smell and taste or by disgusting the stomach. The new catharsis is invisible, its agents inoffensive and its results vastly more satisfactory. And so is it for other maladies and in other ways.

The trends of modern medical education lay stress on subjects other than materia medica which, with its botanical names and natural orders plagued the students of the past. Questions once standard with former examiners are seldom heard now and still more seldom pressed to their former length. For example the following dialogue (at one time not uncommon—in part at least) could never be repeated in examination halls today. There was a student who lacked brilliance and an examiner who lacked sympathy. They faced each other in the last examination of the year—materia medica. Fortune had not smiled upon the candidate. From the beginning of this testing time he had had much luck but it had all been bad, and whenever it changed, it was only for the worse. And now here was the last examination and the least desirable examiner.

Said the examiner, "You have a patient with diarrhoea. What would you prescribe?" "Chalk mixture," answered the student. "What else?" said the examiner. "Kino," replied the student. "What else?" repeated the examiner. "Bismuth," answered the student. "What else?" "Catechu." "What else?" "Acetate of lead." "What else?" Opium." "What else?" "Lead and opium." "What else?" "Krameria." "By this time," muttered the student sotto voce, 'the so and so should have constipation." But still the question came "What else?"

There threatened to be no end to this chorus. The student was dispirited. His stomach was empty, his bladder was full, his nerves were

frayed, his hopes were dashed. As the interrogation lengthened his temper became shorter until the last straw was added in another "What else?" "What else?" he said, "I'll tell you what else I'd take that man and stand him on his head, and fill his rectum full of sealing wax, and I would seal it with the great seal of this college and if anything got past that it would be damned good." Then, turning on his heel, he made for the door. What happened afterwards I do not know, but the student deserved a pass and the examiner deserved to be the patient.

My little book still lies before me wondering what will be its fate. Little book, than you, nothing could be more useless. But you have come to my aid in times past and, let us trust, have now brought a bit of amusement to some who out-age you and to others whom you out-age. I hope so and, in that hope, here is your reprieve.

Strathclair, Manitoba,
July 17th, 1951.

Editor, M.M.A.

Sir:

On July 14th I had a Mat. case and a 10 lb. 10 oz. Indian boy was born with a cord measuring 42 inches in length.

I was wondering if you could tell me what the record length for a cord is.

Gordon MacKenzie.

The average cord is about 20-24 inches long, although marked variations in length have been reported; e.g. one only two inches long and others up to four or five feet in length. According to measurements taken from the fundus to the pelvic outlet, and, from umbilicus to rump, a cord must be at least fifteen to sixteen inches long; anything under that is an **absolutely** short cord. There may, of course, be relatively short cords, because of the number of times a cord may be wrapped around the baby. The absolutely short cord may give rise to trouble but the unduly long ones seldom do. However, in malpositions and malpresentations the long cord may have a tendency to prolapse more readily than the normal one. Otherwise long cords have no clinical significance and are of interest only as curiosities.

Ruvin Lyons.

Happiness

If you would be happy for an hour, drink wine,
If you would be happy for three days, get married.
If you would be happy for eight days, kill your pig and eat it.
If you would be happy all your life be a gardener.
(Or so they say in China).

Golf Tournament

It is the intention of the Manitoba Medical Association to hold a Golf Tournament in conjunction with the Annual Meeting, the date of such to be the morning of Tuesday, October 9th.

A suitably inscribed cup is up for play and prizes will be given for different events.

The holding of this Tournament is, however, contingent on there being sufficient number of doctors interested in such an event. Would all those who intend to compete, therefore, notify the convener of the Golf Committee, Dr. E. W. Pickard, 428 Medical Arts Bldg., as soon as possible. All those who write will then be notified if the match will be held and if so where and when.

In past years this annual Tournament has been a very enjoyable gathering of the medical golfing fraternity and we hope that revived interest may be shown to make it once again a memorable occasion.

Announcement of Van Meter Prize Award

The American Goiter Association again offers the Van Meter Prize Award of Three Hundred Dollars and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. The Award will be made at the annual meeting of the Association which will be held in Saint Louis, Missouri, May 1, 2 and 3, 1952, providing essays of sufficient merit are presented in competition.

The competing essays may cover either clinical or research investigations; should not exceed three thousand words in length; must be presented in English; and a typewritten double spaced copy in duplicate sent to the Corresponding Secretary, Dr. George C. Shivers, 100 East Saint Vrain Street, Colorado Springs, Colorado, not later than March 1, 1952. The committee, who will review the manuscripts, is composed of men well qualified to judge the merits of the competing essays.

A place will be reserved on the programme of the annual meeting for the presentation of the Prize Award Essay by the author, if it is possible for him to attend. The essay will be published in the annual Proceedings of the Association.

International College of Physical Medicine—The Congress will be held in London, Eng., from the 14th to the 19th of July, 1952. Applications for the Provisional Programme should be addressed to the Honorary Secretary, International Congress of Physical Medicine (1952), 45 Lincoln's Inn Fields, London, W.C. 2, Eng.

Articles

The Australian Health Scheme

Sir Earle Page, Minister of Health in the Commonwealth Government of Australia, visited Winnipeg early in August and, among other things, spoke at a luncheon. What he dealt with you will find in the subpended memorandum which he gave me at the time.

Sir Earle has represented his constituency for over thirty years. He has served both in Government and in Opposition. During all these years the health of his fellow-subjects has been close to his heart and he has done much to establish means whereby that health can be guarded and improved.

The plan in operation "Down Under" differs from our local plan in that it is in a sense more generous (for it reaches all). And of course here we have no Federal Scheme. The Australian—or, rather, the Earle Page Scheme—takes the middle way between the Nothing-for-Nothing policy prevalent until recently; and the Everything-for-Nothing Scheme that bedevils Great Britain. The Australian plan of Nearly-Everything for Nothing seems eminently sensible. Matters are arranged so that no one is oppressed by the cost of illness. Only indigents get free treatment. For others the cost of care is graduated according to their means and demands. The requirement that each patient pay something towards the charges of his illness is designed to prevent abuse.

Domiciliary care, because it is less expensive than hospitalization, is encouraged with a resultant better use of available hospital beds.

Sir Earle stressed the importance of medical affairs being in doctors' hands. Governments, he pointed out, are all too ready to conduct our affairs for us. Only an alert attitude on the part of the profession can prevent such undesirable intrusion.

He was very emphatic on the advantages of voluntary acceptance of the Scheme by the people. Compulsion, however admirable may be its objects, is never liked. The Australians are being coaxed, not compelled; attracted not driven into, the scheme which is so greatly to their advantage. And the results are excellent. All groups of people are responding eagerly. The Government helps its citizens to help themselves, but none are without some assistance.

Special attention is being given to the expansion of Medical Schools and the improvement of medical education so that the quality of practice may be high. After all the keystone of the arch of every Health Scheme is the practitioner.

Sir Earle's long and continuous experience in Parliament on one or other side of the House gives him a unique advantage. He has seen the successes and failures, the proving of good points and bad, of various plans over the years since health benefits became a matter of public and governmental interest. Therefore, among health scheme administrators, few if any are in an equally good position to formulate a plan that approximates the ideal. For that reason his present communication and the one published in our Review, December, 1950, are worthy of study.

The Earle Page Health Plan

Partnership of Government, Medical Profession and Community as Individuals

The essence of this plan is to lessen the impact of sickness, to lessen the consequent loss of productive capacity throughout the community, and to lessen the cost to the individual of medical and hospital treatment by means of a basic grant of government aid directed to prevent or shorten disease, by stimulating throughout the whole community the spread of prepaid voluntary insurance schemes covering the greater part of hospital and medical costs, thus encouraging early diagnosis and treatment.

Preventive measures should be taken on the initiative of governments and should be directed to secure community assistance. For instance, improved sanitation by extension of water supplies and sewerage installations, even into small hamlets, by Federal and State (Provincial) aid in interest and sinking fund costs for the first ten years up to at least two-thirds of the total interest charge and sinking fund payments.

Secondly, to raise continually the standard of medical treatment, especially the provision of ample supplies of highly trained and experienced general medical practitioners, nurses, pharmacists, etc., by Federal and State government aid to medical schools, teaching hospitals, to the construction of new hospitals and the provision of modern equipment to all hospitals.

Thirdly, by the passage of laws making compulsory radiographic chest examinations for early discovery of tubercular infection, and the provision of liberal pensions to acutely infectious tubercular cases to enable them to rest sufficiently to arrest their disease and cease to be a danger to the public.

Fourthly, by improvement of nutrition by such measures as the free provision of milk to school children in creches, kindergartens and public and private primary schools, and measures standardizing the quality of food, drugs, etc.

Fifthly, the free provision of costly life-saving and disease-preventing drugs on the prescription of a physician to prevent or curtail disease.

Hospital Finance

All these preventive measures, by lessening the incidence of sickness, will improve the position of hospital finances generally. Such finances can be still further improved by encouraging domiciliary treatment of minor illnesses.

To this end the Australian Government has come to an arrangement with the Australian division of the Britsh Medical Association for the free treatment on a concessional fee-for-service basis in the doctor's surgery or in the patient's home, and the free provision of medicines, to aged and invalid pensioners and their dependants.

Extension of prepaid hospital insurance can be greatly assisted by the grant of a basic governmental aid supplementing the actuarial value of contribution premiums of these schemes in an extension of the period of hospitalization, in the reduction of the waiting time before insured benefits begin to operate, and in the coverage of chronic diseases, such as diabetes, which are not ordinarily insurable.

Insurance of Medical Costs

The present system of insurance against medical costs tends to be on a flat rate, to be limited by a definite income earning capacity and to be confined almost exclusively to employed persons.

A wide extension of voluntary insurance to the community as a whole, and especially to the self-employed and rural elements in the community, can be secured by a basic grant of governmental aid towards extending the actuarial benefits possible under existing insurance schemes. Insurance would thereby be made so attractive as to induce many people to seek insurance cover without great expenditure on enrolling agencies. This grant-in-aid would be given only if participating insurance organizations at least matched the government grant for each item of medical treatment.

The grant, plus an equivalent amount of insured benefits, would meet approximately 80 to 90 per cent of the fees charged to the lower income groups. Higher income groups would insure themselves for greater benefits rendered more valuable by the existence of the governmental grant. There would be no direct connection between the Government and the medical profession. Agreements would be made on a long term basis with organizations providing insurance cover.

This absence of direct contact between the Government and the profession would preclude any fixing of standard fees by government edict. It is fully recognized that fees should always have some relevance to quality of service, experience of the physician and financial standing of the patient.

The disciplining of the whole scheme would be a matter for the medical profession itself. In Australia the free life-saving drugs are decided upon by an advisory committee consisting of seven eminent physicians and pharmacologists. Abuse in prescribing and development of any rackets are also supervised entirely by the medical profession.

The important principle of the whole scheme is that the medical profession itself, because of the security given to it under the scheme, should undertake its wise and equitable control.

In its whole history the profession has shown a keen sense of its duty and of its ethical standards in this connection, and there is no doubt that full recognition, in this widespread scheme, of the essential integrity of the medical profession and sense of duty to the patient and the community will maintain it at even higher heights in the future.

Manitoba Medical Service

During the business sessions of the Annual Meeting of Manitoba Medical Association next month, the activities and trends of the Manitoba Medical Service will be reviewed by a member of the Board of Trustees.

In the hope of eliciting ideas from medical members, the following is submitted as a reflex of current thinking in the U.S.A.

The material is taken from "Health Insurance Plans in the United States," a "Report of the Committee on Labor and Public Welfare, to the United States Senate, May, 1951." As there are more than 350 pages in the report, an extract is taken from a summary of findings and recommendations. Not all of it may be germane to our problems in Manitoba but something of interest may be gleaned by the thoughtful reader.

Differences of Opinion Concerning Medical-Care Insurance

"There are differences of opinion on a number of important points concerning medical-care insurance. Some of the differences reflect the divergent points of view of some of the providers of insurance, as contrasted with the views of some representatives of people who purchase it. Differences also appear to spring from differing social philosophies. Some of the points of difference are:

1. "What is the purpose of medical-care insurance? Some believe that the sole desirable purpose is financial protection against the costs of 'catastrophic illness.' Others take the view that insurance is the desirable method of paying for all or most medical services, as against the system of post-payment by consumers on a fee-for-service basis. There are those who would limit medical-care insurance strictly to a financial arrangement, and others who believe that insurance should be looked upon as a means for influencing favorably the availability of preventive medicine, early diag-

nosis and treatment in case of illness, the quality of the services provided, and the improvement of medical facilities both quantitatively and qualitatively.

2. "What items of medical service is it desirable and possible to pay for in whole or in part by insurance? From the experience of both comprehensive and limited plans, it is evident that the insurability of many items of service varies with the form of medical and administrative organization of the plan providing the insurance. If insurance against the costs of certain items is possible only through major changes in the pattern of medical practice, are the benefits to be gained large enough to justify disturbances and controversies that may accompany such changes? Here sharp differences of opinion are found.

3. "Who should be insured? Do, for example, people of the highest economic status really need or desire insurance and, if not, at what income level should the line be drawn? Or is any income limit desirable? Other issues relate to insuring those persons in the lower economic groups who can pay little or none of the insurance costs. Therefore, if insurance is to be utilized for these groups, at least a part of its costs must be met by other public and private sources, including employer contributions under group enrollment.

4. "How should the payment of insurance costs be distributed? Here appears a contrast between the positions of private and social insurance. On the one hand, the position of private insurance is that the premium for the individual or group insured should be related more or less directly to the expected cost of insuring that individual or group; on the other hand, the position of social insurance is that costs should be distributed so far as possible over the whole society or community and be borne by individuals largely in proportion to their ability to pay. A middle ground is also found, combining some elements of both of the above viewpoints.

5. "How far should governmental action go in extending medical-care insurance? There are those who believe that insurance legally required of the whole self-supporting population, or of the larger part thereof, is the only way whereby the benefits of such insurance can become available promptly and economically to the majority of the population; and who believe that such action should and can be so designed as to maintain medical efficiency and freedom and democratic methods of administration. On the other side are those who believe that a widespread legal requirement of medical-care insurance is unnecessary, because voluntary plans will meet all or most of the needs that should be met; and who believe serious evils for medical practice and American freedom would result from such legally required insurance. Between these two groups are others who believe that voluntary plans alone will not cover all the needs and who favor governmental aid to voluntary plans, under various terms and conditions.

6. "How much of the national product (or of a family's income) do we wish to use for the support of doctors, dentists, nurses, hospitals, and other health services and facilities? To put it bluntly, how many doctors, etc., having what standard of living, do we think it worth our while to support?

7. "Finally, there is no general agreement as to whether the Nation is spending through insurance or otherwise, enough on medical services to assure the best health for all its people. There are no accepted and absolute standards by which this can be judged. If we examine expenditures for general hospital and physicians' services, we find that in some comprehensive insurance plans where liberal use of these services is encouraged for both preventive and curative purposes, annual expenditures for physicians' and general hospital services, range from $22 to $38 per capita. This may be compared with an expenditure of approximately $30 per capita for the same services for the population as a whole in 1949.

Problems of Voluntary Medical-Care Insurance

"Despite differences of opinion as to just how many people need health insurance protection and as to just how much protection they need, there is general agreement that more people should have more health-insurance protection than is the case at present. The principal problem, therefore, is how to extend broader benefits to more people at a price they wish to pay or can afford.

"This problem has a number of aspects. Many of its implications have been referred to in the preceding section. From the viewpoint of the consumer, comprehensive insurance is frequently not available to him for various reasons. For example, there are relatively few places in this country where comprehensive plans as defined in this report are in operation. The cost of comprehensive insurance, if desired, may be beyond what the consumer is able to pay—or feels he wishes to pay. His problem differs, of course, depending upon geographic location, economic status, attitude toward insurance, age, physical condition and medical history, family status, and many other factors.

"This situation exists for the consumer because of a number of problems which face voluntary medical-care insurance as a whole and which may be summarized as follows:

1. "A person may not feel a need for medical-care insurance until he has to meet a hospital or large doctor's bill and this happens to only about 1 person in 10, or 1 family in 4 each year. This may present some difficulties in enrolling the uninsured as well as in selling additional benefits at

a higher cost to those already carrying some insurance.

2. "Along with advances in prices and incomes, the costs of hospital care and physicians' services have risen during recent years, and insurance has had to cope with these increased expenses. Adjustments in premiums or benefits or both have been made. In many instances among service plans this has necessarily resulted in larger premiums to provide the same services; in other instances services have been curtailed or indemnities substituted for service benefits; in still others premiums and benefits may have stayed the same or they may even have been increased, but the purchasing power of the benefits may in effect, have been reduced.

3. "Surgical and other benefits for the cost of physicians' services, in particular, may be successfully broadened to only a limited extent under the fee-for-service system, without running the risk of a tendency to high utilization, unless the enrollee is a partial 'coinsurer,' i.e., retains the responsibility for paying part of his bill directly; or unless the physician agrees to prorating, i.e., agrees to accept less than full payment under the agreed fee schedule when the total expenses exceed the total income available to the plan.

4. "Special problems exist and much experimentation is required with respect to insurance coverage for the cost of dental care and for the costs of nursing, drugs, and medical supplies outside the hospital.

5. "The comprehensive plans have shown that it is practicable to cover almost the entire costs of the services of physicians and general hospitals, often through the use of their own facilities and medical staffs, but this is usually accomplished by a departure from fee-for-service payments to a contract or salary basis, which limits the compensation of physicians in relation to the volume of services they provide, thus furnishing an incentive for the physician to limit utilization of services to those that are medically necessary. Organized medicine has generally opposed such contracts when they cover general medical services, especially when made with groups of consumers, and has put pressure on physicians not to accept them. Its opposition is based on the fact that such contracts are generally limited to only a portion of the medical profession of the community.

6. "Another problem under voluntary medical-care insurance is how to reach the many people who need insurance protection but who cannot now obtain it readily, either because they feel the cost is more than they can afford or want to pay; or because they cannot easily be reached by group insurance, as is the case with the self-employed and much of the rural population; or because they are among the persons regarded as the 'poorer risks' (i.e., those most likely to need medical care), such as persons already having an illness or disability, the aged, the very young, and so on; unless they can be included under group insurance. In some areas racial groups may also have difficulty in obtaining insurance.

7. "Since rates in most voluntary medical-care insurance plans are generally not graded in accordance with earnings, it requires a higher per cent of the individual's income in the lower economic groups to buy medical-care insurance. It is difficult, therefore, to reach the lower economic groups who may find it hard to pay these premiums, except where an employer or other third party pays all or part of the cost.

8. There is no available information regarding the extent to which individuals enrolled in voluntary medical-care insurance plans drop their protection, and later re-enroll in the same or other plans, or do not re-enroll with any plan. Loss of employment with the insured group, change of residence, lack of utilization or dissatisfaction with insurance plan, maturity of children in families carrying insurance, and a variety of other reasons may cause the enrolled to drop his insurance protection, at least temporarily. The extent of this turn-over (within one plan or from one plan to another) as well as the effect it has upon enrollment, upon benefits and upon the administrative costs of voluntary insurance plans constitutes an important question of which the insurance organizations are cognizant. To date, no practicable method has been devised for maintaining record-keeping systems necessary to produce representative data on this problem.

9. "The comprehensive group practice plans have special problems of their own. As distinguished from insurance plans that provide cash benefits, those comprehensive plans that directly operate a medical service must provide physical facilities for their doctors and attract and keep medical staffs in the face of much opposition from organized medicine. They must also attract subscribers in spite of the fact that their comprehensive benefits usually cost more than the partial benefits of other plans. The initiation of such plans is now in many States impeded or prevented by restrictive legislation. As a result of these difficulties, the comprehensive plans as a whole have grown slowly, although several individual plans, such as those in New York, Seattle, and Oakland, Calif., have had rapid growth recently.

Trends and Potentialities of Voluntary Medical-Care Insurance

1. "Growth in numbers of persons having voluntary insurance against some parts of the costs of needed care has been rapid, although the rate of growth for hospital insurance has slowed down slightly in recent years. Prospects appear to be good for further increases in enrollment of

those persons who can be reached by group insurance, especially because of the emphasis being put on this type of insurance in collective bargaining.

2. "Individual enrollments have also increased in numbers. However, prospects for voluntary insurance to reach individuals who are not in groups and who fall within the category of poorer risks, or to reach persons of lower incomes will depend largely upon the extent to which the insurance principle can be applied to them at costs reasonable for their means or the extent to which group enrollment can reach them. Proposals have been suggested which would make available public subsidy to assist in the coverage of this group or which would include them within broader groups by law. There are those who point out that requiring health insurance by law would be a prompt and economical means of achieving comprehensive population coverage. On the other hand, there are those who feel that this would be overbalanced by dangers to the quality and cost of service and would have undesirable social effects.

3. "There has been a trend toward reduction in the number of exclusions and limitations of coverage, accompanied by a lengthening of the benefit period, extending additional types of protection, and increasing the dollar amounts of benefits offered by medical-care insurance. However, there is room for a substantial further broadening of health insurance protection which most people now have. Benefits nominally offered may be broadened relatively easily if the enrollee continues to be a partial 'coinsurer,' i.e., bears a portion of the bill directly, but this diminishes the likelihood that the subscriber will obtain adequate preventive care or the full range of therapeutic services, even when offered. When benefits have included preventive medicine and have come close to covering costs completely, a fundamental change in pattern of organization has often been required, involving arrangements for paying some physicians on other than a fee-for-service basis, or if on a fee-for-service basis, using a prorating arrangement.

4. "The growth of voluntary insurance plans will be influenced by a number of other elements: First, the type and amount of insurance the subscriber may wish or can afford to purchase; second, the degree of priority the purchaser assigns to such insurance in relation to other goods and services; third, the extent to which certain costs of health care can be adapted to the recognized principles of insurance; and fourth, adherence to the principle that the existence of insurance benefits shall not cause an increase in the costs of medical and allied professional services.

5. "The potentialities of medical-care insurance for effecting improvement in the health of persons holding insurance will be greater if more emphasis than is now the case can be placed upon quality of care, preventive medicine, early diagnosis and treatment outside the hospital rather than hospitalized illness as at present. By such a change in emphasis, the use of expensive hospital bed facilities, and eventually, the aggregate cost of medical care might be reduced. In this connection, it must, of course, be recognized that many other factors besides insurance influence people's health. Among these are environmental conditions, economic circumstances, availability of medical personnel and facilities, attitudes and understanding of people with respect to their health and the use of health services.

6. "Medical-care insurance has potentialities for stimulating the creation of needed facilities and the location of professional personnel in many rural and some other areas where insurance protection is now of little benefit because of the absence or inaccessibility of such facilities and personnel. Medical-care insurance might better realize these potentialities if it placed a greater emphasis upon the provision of comprehensive benefits through organized service units such as hospitals and group medical practice, wherever practicable.

7. "If the comprehensive plans were enabled to overcome the legal and practical difficulties enumerated in the previous sections, they have great potentialities not only for protecting their subscribers against nearly all the costs of the services of physicians, hospitals, visiting nurses, and perhaps, of dentists, but also for the improvement of health through preventive medicine and health education, for providing care of known professional quality in an organized fashion, for the creation of facilities, and for attracting physicians and others to areas where they are now deficient.

8. "There is abundant evidence that existing insurance plans, whether under Blue Cross, Blue Shield, insurance company, or independent auspices, have a real desire to increase the number of people they reach and the range of benefits provided. Problems exist for all plans and serious handicaps are imposed on some. They are studying these problems and attempting to resolve them through the efforts of their experienced staff members. Organizations representing consumers, especially unions and co-operatives, are also studying the advantages and disadvantages of existing and proposed plans for providing medical-care insurance. Much remains to be accomplished, and a continued impartial study of these problems could be of great assistance."

Guest Opinion

"We must realize that health insurance is the only kind of insurance in the world which has even attempted to succeed without the protection of law. Fire insurance could not exist a minute without laws prohibiting arson; nor could marine insurance, automobile insurance or even life insurance exist without legal protection. But the only protection of health insurance is the doctor."

From a speech of Paul Hawley, M.D., Chicago, Director American College of Surgeons, and former Chief Executive Officer Blue Shield-Blue Cross Commission).

J. C. MacMaster, M.D.

Manitoba Hospital Service Association

The Mortar Between the Bricks

P. W. Dawson

Credit is the peculiar mark of the twentieth century economic system we refer to as "free enterprise." Credit created the kind of mass demand for goods and services which made possible our large scale production. Never in history until today has there existed such a demand for goods and never in history has production reached its present heights.

More people today want more medical care and more hospital care than ever before. This demand is ever on the increase. The advances of modern medicine in knowledge, technique, and equipment; the individual's recognition of good health as an essential to economic and social security, produced the demand.

Where the business man created the mass demand for his goods and services by the device of large scale consumer credit, the doctors and hospitals suddenly found themselves faced with a mass demand, independently created, which threatened them with a revolutionary change unless they found the large scale means of financing it.

In this situation the doctors and hospitals followed the lead of the business man. They created credit to finance the payment of the doctor's bill and the hospital bill. It will be noted that the process was inverted. The business man created credit to produce the demand for his goods and services; the doctors and hospitals, faced with the demand, created credit to finance it.

Credit is created in two ways: (1) by advancing goods and services against future earnings; (2) by payment out of current earnings against future needs. The one is post-payment, the other prepayment. The former is the method of credit-creation followed by the business man; the latter that adopted by the doctors and hospitals.

The difference in method in no way alters the sameness of the operation. The business man is interested in selling his goods, the financing is therefore made a part of the sale, and he gives us the goods. The hospital is interested in selling its services, the financing is therefore made a part of the sale and it gives us the services. The first takes on aspects of banking and the second of insurance; the business man is not interested in banking as such, nor the hospital in insurance as such. Each is concerned only with financing the sale.

Historically, hospital administrators moved first. In 1929 Dr. Kimball, superintendent of Baylor University Hospital, offered to provide the school teachers of Dallas with 21 days of hospital care for $3.00 a semester. This is usually accepted as the starting point of the pre-payment plans for hospital care which under the aegis of the American Hospital Association developed into the Blue Cross Plans which today provide essential hospital care to over 41,000,000 persons in Canada and the United States.

During the war years, medically sponsored plans were similarly organized to prepay doctors' bills and these today protect 19,000,000 persons.

Blue Cross, then, is a credit operation that brings the Blue Cross member and the voluntary hospital into a direct buyer-seller relationship. The credit it provides can be realized only in terms of hospital service. The hospital contracts to provide the care when the subscriber, who has prepaid it, is in need of its services.

Similarly the medically-sponsored plans are to the medical profession what Blue Cross is to the hospitals.

When the Department store gives us credit, we can select the goods we wish and pay for them on the terms arranged; but when the hospital furnishes its services, a third party enters into the transaction. Neither the subscriber who has prepaid the care, nor the hospital which sells it determines what care shall be provided. This is within the judgment of the doctor. He decides when the care is needed, what services should be provided and when the need ceases. He is in effect the mortar between the bricks which holds the structure together.

Now, it must be noted, the care the hospital undertakes to provide is not an unlimited service. It is precisely defined in the agreement the subscriber enters into. As a practical consideration, his willingness to pay must be taken into account. He wants the care he is most likely to require when sick at a price which he thinks he can afford. The monthly subscription fee he pays therefore is calculated closely and the services he is to receive are as closely set forth.

Some will seek services in excess of entitlement. Many are predisposed to the getting of

something for nothing. Such traits make the role of the doctor difficult. When a subscriber is admitted to a hospital where he would not have been admitted had he not been a subscriber; when a subscriber is permitted to remain in the hospital a day after he is able to be discharged; when he receives services not consistent with the hospitalized illness, or services which would not have been prescribed were he paying cash at the time of treatment, he has no entitlement. He has prepaid only necessary care and treatment. Such unentitled services can be provided only at the expense of other subscribers. He has in effect defrauded the fund.

The doctors have the responsibility to prevent all such abuses. They assumed it voluntarily and properly. Their interest in the problem is a professional interest—it is also a selfish interest. Health is their business. Fundamental to the voluntary system of medical practice is the personal doctor-patient relationship. If this relationship is to be safeguarded, the final decision as to admittance to hospital, as to discharge, and as to prescription of service must rest upon the doctor.

This personal hospital-patient, doctor-patient relationship involving freedom of the patient to choose his hospital and his own doctor, and freedom of the doctor to practice his profession with no outside control or dictation is the crux of the problem. Advocates of compulsory government financing of hospital and medical bills promise no interference between doctor and patient. But all doctors recognize that high quality hospital and medical care cannot be provided that way. The sole answer of the Socialist to the problems of Socialism is more Socialism. Sooner or later, the government is compelled to take over the hospitals; when this is found to be no cure, then the doctors in turn become servants of the State. The sole alternative to Socializing hospitals and doctors is the voluntary hospital-sponsored and doctor-sponsored Blue Cross and Blue Shield.

While it is true, therefore, that hospitals and doctors have a selfish interest in protecting Blue Cross and Blue Shield from the abuse that will mean failure, it is also true that their motivation is on a higher plane. Their interest in the welfare of their patients and in the standard of community health is a major factor.

Hospitals and doctors decided to guide their own prepayment plans, and do support and maintain them because (a) they want to be sure that the plans develop vigorously and single-mindedly to meet the problem of financing hospital and medical care for the population: (b) they want to be sure the high standards of hospital and medical care are safeguarded; (c) they want to be sure the benefits provided the people measure up to the minimum needs of realistic hospital and medical care.

As far back as 1935 when pre-payment Plans were in their very infancy, a Committee of Canadian Medical Association studied the problems involved. Its report makes interesting reading today both in respect to the recognition thus early of sound principles, and of possible dangers which happily have been avoided. There is the implication, for instance, that some fear was felt that the final decision as to admission, discharge and prescription of services might not be left to the free judgment of the attending physician. This freedom of professional practice involved a responsibility to protect the fund against abuse which, under pressure from the patient, might be too lightly recognized in some quarters.

The Committee therefore recommended:

"Apparent undue hospitalization or unnecessary prolongation of such might best be handled by referring such cases to a committee of the medical staff of the hospital concerned or of the staffs of the combined hospitals, which committee would make its decisions or submit its advice to the executive body of the fund after consultation with the doctor in charge of the case."

This recommendation was never implemented in Manitoba, though in other areas Medical Advisory Committees have been set up and have served with marked success in protecting the actuarial soundness of both Blue Cross and Blue Shield. The need for serious consideration of the problem by the Medical Profession is indicated today.

That a problem exists and that it is serious is undoubted. On the other hand, the very success of hospitals and doctors in making the transition to the economics of twentieth century free enterprise industrial society is an augury for the future. Their foresight and leadership have strengthened the structure of the whole democratic community. The enrolment of 310,000 persons in Blue Cross and the monthly payment to hospitals of a quarter of a million dollars is a tremendous gain to the profession and the well-being of the Province.

The stake too is high. Practical demonstration that the programme can be effective in serving medically indigents and Social Welfare participants in addition to the employed at a cost for the whole population of two-thirds of the cost of compulsory plans could not be ignored by government authorities.

The co-operation of hospitals and doctors with public-spirited citizens can safeguard high quality medical care of the population.

Association Page

Reported by M. T. Macfarland, M.D.

Civilian Defence

With the appointment of Major-General Penhale as Chief for Civil Defence in the Greater Winnipeg area, considerable impetus has been given to the important matter in the province. Bulletins are arriving in the Association office, and with the appointment of a Medical Officer, Grade 7, to the Department of National Health and Welfare to study matters in connection with medical aspects of Civil Defence, even more activity may be anticipated.

Public Relations

The local committee has agreed that articles written by outstanding leaders of the medical profession and appearing under the title "Careers in Medicine" may with profit be placed before the members of the profession in this Province to be read also by patients who are desirous, while waiting in the doctor's office, to learn more of what makes the medical profession "click!" Reprints of the articles are available through the Editorial Committee of the Ontario Medical Review which presented the articles.

Suggestions for the Annual Meeting of the Association

There is always such a tendency for the pattern of an annual meeting to become stereotyped that consideration of methods for improvement should always be welcomed. Such a list was presented to the Executive Committee by Doctor Hossack, while not finally adopted in toto will form the basis for study by future committees. The desirability of an early selection of dates, place of meeting and speakers is a sine non quod. Unless the Scientific Programme Committee is selected early, from persons who have had previous experience, and is given a mandate to contact outstanding speakers before they have other commitments, it will be difficult to present drawing card for members of the profession not only in Manitoba but in the neighbouring provinces and states. The work of the Publicity Committee must be more abundant to arouse interest outside the province and enthusiasm at home. Last year our Commercial Exhibitors claimed that our meeting was "the best ever"—a difficult mark to reach and surpass!

Fees for Insurance Examinations

Some years ago the Canadian Medical Association discussed the matter of fees paid to physicians for examinations by life insurance companies. A committee was appointed to discuss the matter with the companies, but little progress was ever reported although the fees were made more liberal by some individual companies. The M.M.A. fee schedule contains no suggested fee for insurance examination and the matter will be referred to the Fee Committee for investigation and action.

Canadian Society of Radiological Technicians

The Ninth Annual Dominion Convention of the Society will be held in Winnipeg, September 12th to 15th, 1951. A contribution was voted by the Executive Committee to assist the Society in defraying the costs of this gathering of representatives from all the provinces of Canada.

Anaesthetists, Fee-For-Service

Information was received from the Superintendent, Grace Hospital, and from the resident hospital anaesthetists that, effective June 1st, anaesthetic charges will be rendered on a fee-for-service basis. It was also reported that similar arrangement had been reached for St. Boniface Hospital.

Medical Arts Clubrooms

In acknowledgment of the frequent use which is made of these quarters by the various dental and medical organizations for luncheon, evening and occasional Sunday meetings, it was agreed that a contribtuion should be made towards the cost of supplying suitable and up-to-date reading material.

Winnipeg Orthopaedic Society

A letter suggesting that the revised Association Schedule of Minimum Fees should be used for submission to the Workmen's Compensation Board was referred to the appropriate committee. A further letter suggesting that the appointment of one orthopaedic representative to each of the Fee Committee and the Workmen's Compensation Board Negotiating Committee was not acted upon since any member or group of members may approach the Fee Committee to discuss problems, but the size of the committee must remain sufficiently small to ensure a measure of agreement on fees.

Professional Secrecy

One member inquired whether the wording of certain prepaid hospitalization contracts permitted the physician to divulge information concerning conditions for which he had formerly treated patients without specific written authorization. The subscribers' service contract, also the application form for non-group hospital coverage does include certain waivers, but the Executive Committee decided that legal opinion on this matter should be obtained.

Pension Retirement Fund

Consideration of a plan for employees of the C.M.A. Divisions will await decision of the Executive Committee and General Council which meets at Montreal later this month.

Social News

Reported by K. Borthwick-Leslie, M.D.

Dr. and Mrs. W. H. T. Peake, Transcona, celebrated their 50th wedding anniversary by holding a reception for friends, afternoon and evening of Sept. 15th. Sincere good wishes for the future.

♦

Dr. Gregory Novak has been the "topic" of a very nice editorial tribute, in the recent Ukrainian Anniversary Celebration. Dr. Novak was the first Ukrainian immigrant to become a dotcor in Canada. He graduated from McGill in 1917, and as part of medical practice, undertook an educational mission among his immigrant patients. Dr. and Mrs. Novak have six children, all important musicians and students

♦

Congratulations to Dr. Morley Elliott who has been appointed deputy minister of Provincial Health and Welfare Department, succeeding Dr. F. W. Jackson, who in 1948 transferred to a position in Ottawa. Dr. C. R. Donovan has been acting deputy but is now on leave of absence. He will continue with the department in an administrative position.

♦

Our old pal Dr. Norman Sloan is continuing to cop off honors in the states. He has been awarded an $8,500 fellowship at the New York Neurological and Psychiatric Institutes to continue his research work in the Relationship of brain function and emotional states. Nice going, Norm, hope you still have time to keep up the music too!

♦

I have been interested in the announcement re the new Speech Therapy clinics at the Children's Hospital.

The clinic was started Aug. 15th and is under the supervision of Dr. Robert MacNeil, O.P.D. Can't help but wonder if Bob is going to teach the kiddies how to tell those "stories" as fluently as he does.

♦

Dr. M. E. Kahanovitch, formerly of Elgin and Souris, announces the opening of his offices in the Balfour Drug Building, Cathedral and Main. Dr. Kahanovitch, B.Sc. '36 and M.D. '41, has been Health Officer for the Whitewater district for 10 years.

Dr. and Mrs. Kahanovitch, with Harvey Philip and Israel David will live at 625 Lansdowne Ave. Welcome to Winnipeg doctor and thank you for the explicit notice. That's the kind of co-operation I need.

♦

Congratulations to Dr. and Mrs. J. B. Gemmell on the birth of a son, Sept. 6th, and to Dr. and Mrs. Murray Mink on the birth of their son, Sept. 4th.

The boys and girls overseas seem to work in some fun along with their post graduate work. An attractive picture of Dr. and Mrs. J. B. R. Cosgrove, Dr. Ronald Cosgrove and Mrs. Rod Chadwick was taken in front of Holyrood Palace, Edinburgh, Scotland, where they are attending the International Musical Festival.

♦

Dr. and Mrs. E. L. Ross were feted in honor of their 25th wedding anniversary. Judith and Bruce entertained at an evening party for their parents. Time does ramble on. I remember when Eddy was married in Morris.

♦

The home of Dr. and Mrs. Harry Hershfield was the scene of a candle light wedding when their only daughter, Shayla, became the bride of Dr. Murray Gerald Atnikov of Minneapolis. The bride is a '50 graduate in Interior Design, U. of M. and the groom a '50 graduate from Man. Medical School. At present he is working on a fellowship in Anaesthesia at University Hospital, Minneapolis.

♦

The wedding of Sheila Sigesmund to Dr. Hyman Maurice Paisner, took place Aug. 21st in the Blue Room, Marlborough Hotel. Dr. Paisner is a '51 graduate and will be located in Estevan, Sask.

♦

Sept. 1st in St. George's Anglican Church, Shirley J. McMillan became the bride of Dr. Gordon Chunn. Following a reception at the bride's home, Grosvenor Ave., the young couple motored to the U.S.A. They will reside in Fort Garry.

♦

Rita Baldwin, Warren, Man., on Aug. 25th became the bride of Dr. J. D. Allen, son and Dr. and Mrs. J. Allen, Edmonton. Upon their return from a motor trip to Banff and Edmonton the young couple will reside in the Blackstone Apts., Roslyn Road.

♦

Dr. and Mrs. E. J. Robb announce the engagement of their daughter, Dr. Jocelyn Irene, to Dr. Cornelius H. H. Neufeld, only son of Dr. H. Neufeld and the late Mrs. Neufeld, Washington, D.C. The wedding will take place Sept. 24th in Knox United Church.

♦

Dr. and Mrs. G. W. Ritchie, with their three children, sailed Sept. 5th for England where Dr. Ritchie has been posted in the Immigration Department of the Canadian Government.

♦

P.S.—Your gossiper was on holidays in August, if I've missed anything please let me know, I mean, of course, in the way of "news."

♦

P.P.S.—Important! Remember the Convention!

Detailmen's Directory

Representing Review Advertisers in this issue, whose names are not listed under a business address.

Abbott Laboratories
G. J. Bowen 44 559
R. G. (Bud) Harman 592 648
D. A. Tedford 724 863

Allen & Hanburys Co.
H. W. Heaslip 39 401
E. M. Tackaberry 404 184

Ayerst, McKenna and Harrison
W. R. Card 49 829
C. G. Savage 34 558

British Drug Houses
F. J. Burke 38 413

Ciba Company Ltd.
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Fred Ruppel 422 769

Connaught Laboratories
Brathwaites Ltd. 922 635

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Merck & Co.
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Ortho Pharmaceutical Corp.
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Park, Davis & Co.
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Poulenc Limited
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Sandoz Pharmaceuticals Ltd.
H. D. Robins 39 936

Schering Corp. Ltd.
Halsey Park 404 346

Schmid, Julius
E. E. Conway 64 274

Shuttleworth, E. B.
S. M. Fairclough 30 158

Will, Chas R.
John R. Hope 401 883

Winthrop-Stearns
Geo. Edmonds 49 744
R. M. Kelly 34 580

Wyeth & Bro., John
A. W. Cumming 35 271
W. J. Tarbet 423 495

Department of Health and Public Welfare

Comparisons Communicable Diseases — Manitoba (Whites and Indians)

DISEASES	1951 May 20 to June 16,'51	1951 April 22 to May 19,'51	1950 May 21 to June 17,'50	1950 April 23 to May 20,'50	Total Jan. 1 to June 16,'51	Total Jan. 1 to June 17,'50
Anterior Poliomyelitis	0	1	0	2	1	5
Chickenpox	213	140	86	70	904	815
Diphtheria	0	0	0	0	5	5
Diarrhoea and Enteritis, under 1 yr.	10	8	9	5	54	68
Diphtheria Carriers	0	0	0	0	1	0
Dysentery—Amoebic	0	0	0	1	0	2
Dysentery—Bacillary	2	1	32	4	10	53
Erysipelas	3	0	1	1	11	28
Encephalitis	1	1	0	0	2	0
Influenza	15	48	5	18	753	116
Measles	193	591	80	224	2456	960
Measles—German	0	4	11	14	25	27
Meningococcal Meningitis	3	0	2	1	13	10
Mumps	125	140	32	25	955	199
Ophthalmia Neonatorum	0	0	1	0	1	1
Pneumonia—Lobar	20	29	21	15	161	136
Puerperal Fever	0	0	1	0	0	4
Scarlet Fever	179	140	6	8	677	184
Septic Sore Throat	2	0	3	1	11	23
Smallpox	0	0	0	0	0	0
Tetanus	0	0	0	0	0	1
Trachoma	0	0	0	0	0	1
Tuberculosis	80	104	122	61	394	483
Typhoid Fever	0	0	2	0	1	3
Typhoid Paratyphoid	0	0	0	0	0	0
Typhoid Carriers	0	0	0	1	0	2
Undulant Fever	0	2	6	0	5	19
Whooping Cough	19	33	13	6	193	102
Gonorrhoea	79	82	76	55	518	488
Syphilis	13	16	12	24	87	114
Tularemia	0	0	0	2	0	5

Four-Week Period, May 20th to June 16th, 1951

DISEASES (White Cases Only) Approximate population.	*779,000 Manitoba	*861,000 Saskatchewan	*3,825,000 Ontario	*2,952,000 Minnesota
Anterior Poliomyelitis	—	1	9	2
Chickenpox	213	96	1848	—
Diarrhoea and Enteritis, under 1 yr.	10	2	—	—
Diphtheria	—	2	—	5
Diphtheria Carriers	—	—	—	3
Dysentery—Amoebic	—	—	1	5
Dysentery—Bacillary	2	—	12	—
Encephalitis Epidemica	1	2	1	—
Erysipelas	3	6	—	—
Influenza	15	—	13	3
Jundice, Infectious	—	—	—	—
Measles	193	101	1296	396
German Measles	—	40	636	—
Meningitis Meningococcal	3	—	5	3
Mumps	125	178	673	—
Ophthalmia Neonatorum	—	—	—	—
Pneumonia, Lobar	20	—	—	—
Puerperal Fever	—	—	—	—
Scarlet Fever	180	57	115	58
Septic Sore Throat	2	5	2	15
Smallpox	—	—	—	—
Tetanus	—	—	—	—
Trachoma	—	—	—	—
Trichinosis	—	—	—	1
Tuberculosis	81	26	105	199
Typhoid Fever	—	3	—	—
Typhoid Para-Typhoid	—	—	1	1
Typhoid Carrier	—	—	—	—
Undulant Fever	—	—	3	16
Whooping Cough	19	16	125	18
Gonorrhoea	79	—	151	—
Syphilis	13	—	44	—

*Ontario's total is for only three (3) weeks.

*DEATHS FROM REPORTABLE DISEASES
For the Month of June, 1951

Urban—Cancer (140, 205), 61; Influenza (480, 483), 2; Measles, 1; Pneumonia Lobar (490, 491, 493), 2; Pneumonia (other forms), 5; Pneumonia of newborn (763), 1; Tuberculosis, 8; Gastro-Enteritis and Colitis (571.0), 1; Septicaemia and Pyaemia (053), 2; Diarrhoea of newborn, 1. Other deaths under 1 year, 18. Other deaths over 1 year, 212. Stillbirths, 27. Total, 257.

Rural—Cancer (140, 205), 45; Influenza (480, 483), 1; Pneumonia Lobar (490, 491, 493), 3; Pneumonia (other forms), 8; Tuberculosis, 12; Whooping Cough (056), 2; Gastro-Enteritis and Colitis (571.0), 2; Dysentery Unspec. (048x), 1; Herpes Zoster (088), 1; Diarrhoea of newborn (764), 1. Other deaths under 1 year, 20. Other deaths over 1 year, 176. Stillbirths, 10. Total, 206.

Indians—Cancer (140, 205), 2; Pneumonia (other forms), 4; Pneumonia of newborn (763), 1; Tuberculosis, 2. Other deaths under 1 year, 5. Other deaths over 1 year, 2. Stillbirths, 2. Total, 9.

*As reported to date.

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Comment

At time of writing communicable diseases are fairly quiet excepting for **scarlet fever**, it continues to be of a mild type.

Breast Abscess and pustular infection of infants is more prevalent than it should be. Techniques on obstetrical and nursery wards should be of the highest order. Staff harboring infection should be excluded from these wards as no doubt they increase the spread. Every precaution should be taken and all members of staff alert to the hazard.

Polio season is just around the corner. There are no signs at present that we should expect an epidemic.

Department of Health and Public Welfare

Comparisons Communicable Diseases — Manitoba (Whites and Indians)

DISEASES	1951 June 17 to July 14,'51	1951 May 20 to June 16,'51	1950 June 18 to July 15,'50	1950 May 21 to June 17,'50	Total Jan. 1 to July 14,'51	Total Jan. 1 to July 15,'50
Anterior Poliomyelitis	1	0	2	0	2	7
Chickenpox	112	213	114	86	1016	929
Diphtheria	0	0	0	0	5	5
Diarrhoea and Enteritis, under 1 yr.	15	10	9	9	68	77
Diphtheria Carriers	0	0	0	0	1	0
Dysentery—Amoebic	0	0	0	0	0	2
Dysentery—Bacillary	3	2	43	32	13	96
Erysipelas	4	3	3	1	15	31
Encephalitis	0	1	0	0	2	0
Influenza	7	15	11	5	757	127
Measles	145	192	56	80	2596	1018
Measles—German	3	0	4	11	28	31
Meningococcal Meningitis	6	3	2	2	18	13
Mumps	43	124	29	32	992	228
Ophthalmia Neonatorum	0	0	0	1	1	1
Pneumonia—Lobar	16	20	16	21	177	152
Puerperal Fever	0	0	0	1	0	4
Scarlet Fever	117	178	10	6	793	194
Septic Sore Throat	1	2	5	3	12	28
Smallpox	0	0	0	0	0	0
Tetanus	0	0	0	0	0	1
Trachoma	0	0	0	0	0	1
Tuberculosis	96	79	128	122	487	611
Typhoid Fever	1	0	0	2	2	3
Typhoid Paratyphoid	0	0	0	0	0	0
Typhoid Carriers	0	0	0	0	0	2
Undulant Fever	0	0	4	6	5	23
Whooping Cough	38	19	24	13	228	126
Gonorrhoea	139	79	96	76	657	584
Syphilis	8	13	30	12	85	144
Tularemia	0	0	0	0	0	5

Four-Week Period June 17th to July 14th, 1951

DISEASE (White Cases Only) *Approximate population	*779,000 Manitoba	*861,000 Saskatchewan	*3,825,000 †Ontario	*2,952,000 Minnesota
Anterior Poliomyelitis	1	1	49	17
Chickenpox	112	122	1835	....
Diarrhoea & Enteritis, under 1 year	15	1	....	....
Diphtheria	....	4	1	3
Diphtheria Carriers	....	....	....	....
Dysentery—Amoebic	....	....	....	2
Dysentery—Bacillary	3	....	....	113
Encephalitis Epidemica	....	1	2	....
Erysipelas	4	5	2	....
Influenza	7	....	4	9
Jaundice, Infectious	....	....	1	....
Measles	145	72	812	258
German Measles	3	29	351	....
Meningitis Meningococcal	6	....	5	4
Mumps	43	148	593	....
Ophthal. Neonat.	....	....	....	....
Pneumonia, Lobar	16	....	....	....
Puerperal Fever	....	....	....	....
Scarlet Fever	117	74	130	19
Septic Sore Throat	1	....	1	9
Smallpox	....	....	....	....
Tetanus	....	....	....	....
Trachoma	....	....	....	....
Tuberculosis	96	39	114	175
Typhoid Fever	1	5	....	....
Typh. Para-Typhoid	....	....	2	....
Typhoid Carrier	....	....	....	....
Undulant Fever	....	....	4	17
Whooping Cough	38	10	161	20
Gonorrhoea	139	....	170	....
Syphillis	8	....	55	....

*DEATHS FROM REPORTABLE DISEASES

For the Month of July, 1951

Urban—Cancer, 35; Measles, 1; Pneumonia, Lobar (490, 491, 493), 3; Pneumonia (other forms), 6; Syphilis, 1; Tuberculosis, 5;Gastro enteritis and colitis, 1. Other deaths under 1 year, 13. Other deaths over 1 year, 159. Stillbirths, 15. Total, 187.

Rural — Cancer, 25; Pneumonia, Lobar (490, 491, 493), 1; Pneumonia (other forms), 3; Syphilis, 1; Tuberculosis, 3; Whooping Cough, 1; Dysentery, 1; Gastro-enteritis and colitis, 1. Other deaths under 1 year, 14. Other deaths over 1 year, 138. Stillbirths, 10. Total, 162.

Indians—Influenza, 2; Pneumonia (other forms), 1; Pneumonia of newborn, 2; Tuberculosis, 1; Gastro-enteritis and colitis, 1. Other deaths under 1 year, 3. Other deaths over 1 year, 1. Stillbirths, 1. Total, 5.

*As reported to date.

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Poliomyelitis—Only three cases have been reported as of August 8th, 1951. This is remarkably low for Manitoba at this date.

Chickenpox, Measles and Scarlet Fever are still fairly prevalent. Scarlet cases have appeared at a few summer camps causing some alarm, but nothing of a serious nature has occurred.

Gonorrhoea shows an increase for the period and the year to date. It is very difficult to control. The simple rapid treatment with penicillin has probably caused certain members of the population to lose their fear and they become infected repeatedly.

Syphilis still shows a definite decrease, which is most gratifying.